

Point Beach 2

Initiating Events

Significance: N/A Nov 02, 2001

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION FOR WHITE PERFORMANCE INDICATOR

This supplemental inspection was performed to assess the licensee's evaluation of the Unplanned Scrams per 7,000 Critical Hours Performance Indicator (PI) for Unit 2 which transitioned from Green to White in the second quarter of 2001. The evaluation was determined to be acceptable. The licensee utilized a structured approach to evaluate the circumstances of the individual plant trips and the collective significance of the four trips to identify potential common causes. The inspector determined that corrective actions for each of the plant trips contributing to the White PI corresponded with the root and contributing causes identified by the root cause evaluations. The corrective actions were either completed or being tracked for completion. In two of the four trips, the corrective action and root cause program established a process for performing assessment reviews to assess the effectiveness of corrective actions. Due to the licensee's acceptable performance in addressing the root and contributing causes of the individual plant trips which contributed to exceeding the licensee response threshold for Unplanned Scrams, the White PI associated with this issue will only be considered in assessing plant performance for a total of four quarters, in accordance with the guidance in IMC 0305, "Operating Reactor Assessment Program."
Inspection Report# : [2001016\(pdf\)](#)

G

Significance: Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

UNPLANNED REACTOR VESSEL LEVEL DECREASE DURING COUPLING OF REACTOR COOLANT PUMP.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure which resulted in an inadvertent decrease in reactor coolant system inventory during reactor coolant pump coupling while in cold shutdown. The finding was of very low safety significance because residual heat removal was not impacted and the amount of water that could have been drained from the reactor coolant system was limited by system configuration and alignment.
Inspection Report# : [2000017\(pdf\)](#)

Mitigating Systems

G

Significance: Nov 06, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO TAKE TIMELY CORRECTIVE ACTION REGARDING INADEQUATE CONTROL OF MAINTENANCE ACTIVITIES DURING COLD WEATHER CONDITIONS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action"), in that the licensee failed to take corrective action prior to the onset of freezing temperatures in the fall of 2001 for previously identified problems with the plant's freeze protection system. The finding was considered to be more than minor because the freeze protection system helps to protect safety-related components from freezing and the system's failure could have a credible impact on safety. Because there was no actual failure of safety-related components associated with the mitigating systems cornerstone, the finding is considered to be of very low significance
Inspection Report# : [2001014\(pdf\)](#)

G

Significance: Sep 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

NO PROCEDURES TO PREVENT EXCESSIVE FOULING OF SERVICE WATER STRAINERS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion V), in that, the licensee failed to provide adequate written instruction to prevent excessive fouling of the service water header strainers. As a result, a condition adverse to quality was self-revealed on September 20, 2001, when auxiliary operators identified, while taking logs, that both the north and south header strainers were excessively fouled. The excessive fouling resulted in the service water system being in a configuration that was beyond design basis analyses. The Non-Cited Violation was considered of low risk significance since, for the plant and environmental conditions at the time of discovery, no actual loss of safety

function occurred or would have occurred.

Inspection Report# : [2001013\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: FIN Finding

HUMAN PERFORMANCE CROSS-CUTTING ISSUE DUE TO WEAKNESSES IN FIRE PROTECTION ENGINEERING AREA

The inspectors identified a number of issues which, collectively, indicated that human performance weaknesses existed in the fire protection engineering area.

Inspection Report# : [2001012\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT EMERGENCY LIGHTING TO SUPPORT SAFE SHUTDOWN

The inspectors identified that there was insufficient emergency lighting to support performance of required safe shutdown actions. Specifically, there was insufficient emergency lighting in the Unit 1 and Unit 2 façade areas to support performing confirmatory actions to fail air to the Unit 1 and Unit 2 main steam isolation valves so as to ensure these valves would not spuriously reopen. The failure to have adequate emergency lighting is a violation of 10 CFR Part 50, Appendix R, Section III.J. The finding was greater than minor because a delay in performing safe shutdown actions could occur due to the lack of emergency lighting. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)



Significance: G Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AUXILIARY FEEDWATER PUMP ROOM HALON SYSTEM INADEQUATE

The inspectors identified that the automatic fire suppression system for the auxiliary feedwater pump room was not adequate. The installed fire suppression system was only designed for surface fires and was not designed to provide the necessary soak time for deep-seated fires. However, deep-seated fire hazards had been introduced to the room. The failure to have an adequate automatic suppression system is a violation of 10 CFR Part 50, Appendix R, Section III.G.2. The finding was determined to be greater than minor because the finding involved automatic suppression, a fire protection defense-in-depth element. The finding was determined to be of very low safety significance (Green) because the inspectors were not able to postulate a fire scenario which could sustain a deep-seated fire and damage redundant trains of equipment. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT APPENDIX R FUEL OIL SUPPLY

The inspectors identified that the licensee had failed to maintain a 72-hour fuel supply on-site for generator G-05 relied upon for safe shutdown in the event of a fire. The failure to maintain a 72-hour supply of fuel is a violation of 10 CFR Part 50, Appendix R, Section III.L.3. The finding was greater than minor because the capability to achieve and maintain cold shutdown conditions for 72 hours was not provided. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)



Significance: G Sep 28, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSSIBLE SPURIOUS OPENING OF POWER-OPERATED RELIEF VALVE DURING FIRES

10 CFR Part 50, Appendix R, Section III.G.1.a required, in part, that one train of systems necessary to achieve and maintain hot shutdown conditions be free of fire damage. As discussed in LER 50-266/1999-006-00; 50-301/1999-006-00, hot shutdown conditions would not have been able to be maintained during the ensuing plant transient which would have resulted from a stuck open pressurizer PORV (power-operated relief valve).

Inspection Report# : [2001012\(pdf\)](#)

G

Significance: Aug 07, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INEFFECTIVE CORRECTIVE ACTIONS FOR FAILURE TO FOLLOW TECHNICAL SPECIFICATIONS CONCERNING COMMON CAUSE FAILURE TESTING OF EMERGENCY DIESEL GENERATORS

The inspectors identified that the licensee failed to take effective corrective action to preclude repetition of the failure to comply with Technical Specification limiting condition for operation requirements directing testing of redundant standby emergency diesel generator power supplies within 24 hours. A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified. The finding was of very low safety significance because, in both cases of Technical Specification non-compliance, the redundant standby emergency diesel generators were tested satisfactorily, indicating that no actual loss of safety function occurred.

Inspection Report# : [2001011\(pdf\)](#)

G

Significance: Jun 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AFW SYSTEM INCORRECTLY RETURNED TO MAINTENANCE RULE (a)(2) STATUS WITHOUT MEETING THE REQUIREMENTS IN THE LICENSEE'S (a)(1) ACTION PLAN

A Non-Cited Violation [of 10 CFR 50.65] was identified for the licensee erroneously returning the auxiliary feedwater system to (a)(2) status prior to meeting licensee established (a)(1) performance goals in December 2000. The licensee's inaccurate monitoring of system unavailability against established (a)(1) unavailability goals was determined to be the cause of the error. Since no actual loss of the safety function of the auxiliary feedwater system occurred, this issue was evaluated as having very low safety significance.

Inspection Report# : [2001010\(pdf\)](#)

G

Significance: Jun 30, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

USE OF THE STEAM GENERATOR BLOWDOWN ISOLATION INTERLOCK DEFEAT SWITCH COULD RESULT IN LOSS OF SAFETY FUNCTION

Code of Federal Regulations 10 CFR Part 50, Appendix B, Criterion III, "Design Control," requires, in part, that measures be established to assure that the design basis specified in the licensee application be correctly translated into procedures and instructions. Contrary to this requirements, the licensee modified steam generator blowdown isolation circuitry to allow defeating the blowdown isolation function during surveillance testing without considering the design basis requirements of the auxiliary feedwater system to provide the heat removal equivalent feedwater flow, 200 gpm, to each unit necessary for post-accident decay heat removal. This issue has been included in the licensee's corrective action program as CR 01-0108.

Inspection Report# : [2001010\(pdf\)](#)

G

Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO PROVIDE DIRECT READINGS OF STEAM GENERATOR 'B' PRESSURE PARAMETER WHICH WAS NECESSARY TO PERFORM SAFE SHUTDOWN FUNCTIONS

10 CFR Part 50, Appendix R, Section III.L.2.d, requires the process monitoring function be capable of providing direct readings of the process variables necessary to perform and control safe shutdown functions. Contrary to the above, the licensee failed to provide direct readings of steam generator 'B' pressure parameter which was necessary to perform safe shutdown functions.

Inspection Report# : [2001008\(pdf\)](#)

G

Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO INSTALL THE FIRE STOPS IN A CONFIGURATION WHICH WOULD PREVENT PROPAGATION OF FIRE FROM ONE REDUNDANT TRAIN TO ANOTHER

10 CFR Part 50, Appendix R, Section III.G.2.b, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards. An exemption to this requirement was granted by the NRC, dated July 3, 1985, which stated that the approved alternative was to install fire stops in the intervening cable trays. Contrary to the above, the licensee failed to install the fire stops in the Unit 1 motor control center room in a configuration which would prevent propagation of fire from one

redundant train of charging pump cables to another.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REDUNDANT INSTRUMENT CABLES WERE LOCATED WITHIN 20 FEET OF EACH OTHER IN THE UNITS 1 AND 2 CONTAINMENTS

10 CFR Part 50, Appendix R, Section III.G.2.d, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards inside non-inerted containment. Contrary to the above, redundant cables for several temperature elements and steam generator level instruments were located within 20 feet of each other in the Units 1 and 2 containments.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSTULATED FIRE COULD LEAD TO LOSS OF REDUNDANT TRAINS OF CHARGING PUMPS

10 CFR Part 50, Appendix R, Section III.L.2.b, requires the reactor coolant makeup function be capable of maintaining the reactor coolant level within the level indication in the pressurizer for pressurized water reactors. Contrary to the above, in eight fire zones, the cables associated with volume control tank and reactor water storage tank outlet valves were routed in the same fire areas. There would be insufficient time to take manual actions to prevent failure of charging pumps credited for maintaining reactor coolant level.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REPLACEMENT OF CHARGING PUMP CONTROL POWER FUSE OUTSIDE APPENDIX R DESIGN BASIS

10 CFR Part 50, Appendix R, Section III.G.1, requires that fire protection features be provided for systems important to safe shutdown so that one train of systems necessary to achieve and maintain hot shutdown conditions is free of fire damage. Contrary to the above, the licensee failed to provide redundant fusing to protect the control cable associated with the credited charging pump which was necessary for hot shutdown condition and was not free of fire damage.

Inspection Report# : [2001008\(pdf\)](#)

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

TECHNICAL SPECIFICATION REQUIREMENTS FOR TESTING RPS ACTUATION SYSTEM LOGIC NOT SATISFIED

Technical Specification Table 15.4.1-1, "Minimum Frequencies for Checks, Calibrations, and Test of Instrument Channels," Item 44, "Reactor Protection System and Emergency Safety Feature Actuation System Logic," required monthly testing of Reactor Protection System trips which includes the power range low power trip and the intermediate range high flux trip logics. Contrary to this requirement, a surveillance test requirement was missed when the licensee failed to test the power range low power and the intermediate range high flux trips within 24 hours after reducing power below 10 percent after having operated in excess of 10 percent power for greater than the monthly surveillance test frequency. This issue was entered in the licensee's corrective action program as CR 01-0118.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO COMPLY WITH LIMITING CONDITION FOR OPERATION ACTION STATEMENT TO START REDUNDNT STANDBY

Technical Specification 15.3.7.B.1.g required redundant standby emergency power supplies to be started within 24 hours before or after the normal power supply or emergency power supply to Unit 1 A06/B04 or Unit 2 A05/B03 safeguards busses being taken out-of-service. Contrary to this requirement, the licensee identified that the standby emergency power supply to the Unit 2 A05/B03 was out-of-service for 37 hours without the redundant standby emergency power supply being started. This issue was entered in the licensee's corrective action program as CR 00-3475.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Feb 12, 2001

Identified By: NRC

Item Type: FIN Finding

16 VALVES ON UNIT 2 SI SYSTEM WERE LOCKED CLOSED INSTEAD OF JUST CLOSED.

The inspectors identified that 16 valves in the Unit 2 safety injection system were locked closed instead of just closed as required by plant procedure. The failure to maintain valve position in accordance with applicable plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors, the repetitive nature of locked valve problems, and the failure of previously identified corrective actions constituted extenuating circumstances in accordance with Manual Chapter 0609.

Inspection Report# : [2001003\(pdf\)](#)

G

Significance: Feb 12, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE CONTROL OF CABLE SPREADING ROOM HIGH ENERGY LINE BREAK BARRIER.

The licensee's quality assurance organization identified that a 4½-inch pipe built into and penetrating a wall of the cable spreading room, used for temporary running of cables into the room, was being controlled as a fire barrier impairment but not as a high-energy line break barrier impairment. The pipe had not been included in the licensee's procedure on high energy line break barriers. The failure to include the 4½" pipe in Administrative Procedure NP 8.4.16, "PBNP [Point Beach Nuclear Plant] High Energy Line Break Barriers," was considered a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements.

Inspection Report# : [2001003\(pdf\)](#)

G

Significance: Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR BYPASSING ALARMS FOR HEAT TRACE CIRCUITS FOR SAFETY-RELATED EQUIPMENT.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that specified actions that inappropriately de-energized heat trace circuits for safety-related equipment when the intent was only to bypass alarms. The finding was of very low safety significance because safety-related equipment was not actually rendered inoperable.

Inspection Report# : [2000017\(pdf\)](#)

G

Significance: Nov 09, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR PRESSURE TEST OF RESIDUAL HEAT REMOVAL VALVE.

On October 11, 2000, the inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that did not require verification of appropriate automatic overpressure protection on hydrostatic pressure test equipment during valve seat leakage testing on Train "B" of the Unit 2 residual heat removal system. This finding was of very low safety significance because procedurally required manual overpressure protection was available during testing and Train "A" of the Unit 2 residual heat removal system was operable.

Inspection Report# : [2000014\(pdf\)](#)

Significance: N/A Aug 22, 2000

Identified By: NRC

Item Type: FIN Finding

SAFETY INJECTION VALVES NOT LOCKED AS REQUIRED BY PLANT PROCEDURE.

The inspectors identified that 24 valves in the Unit 2 safety injection system were not locked as required by plant procedure. The failure to lock the valves in accordance with plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors and repetitive nature of the locked valve problems constituted extenuating circumstances in accordance with Manual Chapter 0609. This finding was assigned to Unit 2.

Inspection Report# : [2000009\(pdf\)](#)

Significance: N/A May 05, 2000

Identified By: NRC

Item Type: FIN Finding

INADEQUATE OPERABILITY DETERMINATIONS.

The inspectors identified that operability determinations lacked sufficient engineering basis to support continuing operability calls. The licensee was able to show current system operability, given the plant conditions at the time of the inspection.

Inspection Report# : [2000006\(pdf\)](#)

G

Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN CALCULATIONS FOR SERVICE WATER TESTING ACCEPTANCE CRITERIA.

The inspectors identified errors in the calculations providing the uncertainty values for determining the service water inservice testing acceptance criteria. The errors resulted in the lower inservice testing acceptance criteria being below the required design minimum flow. The risk significance of this was low because, at the time of the inspection, all six pumps had flow rates above the minimum acceptance criteria. This issue was considered the first example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

G

Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN SERVICE WATER TEMPERATURE UNCERTAINTY VALUES.

The inspectors identified errors in the service water temperature uncertainty values. This resulted in the control room temperature indications being non-conservatively low. The risk significance of this was low because, at the time of the inspection, lake temperatures were below the design basis maximum. This was the second example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

G

Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERROR IN CALCULATION PUMP NET POSITIVE SUCTION HEAD.

The inspectors identified a fundamental error in calculating pump net positive suction head which basically concluded that the pumps would have adequate suction even if the intake was completely uncovered. The risk significance of this was low because, at the time of the inspection, forebay level was sufficiently high to ensure the pumps were operable. This was the third example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Barrier Integrity

G

Significance: Nov 09, 2000

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR SHIELDING PLACEMENT IN FRONT OF CONTROL ROOM WINDOWS.

An operating procedure did not provide for timely placement of portable shielding in front of control room windows to ensure accident doses to operator would remain below NRC limits. This was contrary to Criterion V, "Instructions, Procedures, and Drawings," of Appendix B of 10 CFR Part 50, requires that activities affecting quality be prescribed by documented instructions, procedures, or drawings.

Inspection Report# : [2000014\(pdf\)](#)

Emergency Preparedness

Significance: N/A Nov 03, 2000

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION OF WHITE PERFORMANCE INDICATOR.

The licensee's initial evaluations and corrective actions associated with the White alert and notification system (ANS) performance indicator (PI) were not adequate. Following the initial NRC onsite inspection and a parallel review by the licensee's quality assurance staff, the licensee performed a comprehensive root cause evaluation of ANS performance. The inspector determined that this evaluation was thorough and effectively identified the root causes of the siren system performance issues. In addition, the licensee fully determined the technical issue that resulted in siren test failures. As a root cause, the licensee concluded that the siren upgrade project was performed outside of the licensee's normal procurement

process, which would have provided additional quality assurance, software testing and verification, and project oversight. In addition, the staff did not consistently use the licensee's corrective action system to document system failures. The licensee attributed these failures to a "mindset" among the emergency preparedness staff that resulted in the staff using internal processes instead of normal plant processes. In terms of corrective actions, the inspector found that the licensee's final planned corrective actions appeared to address the root causes identified in its evaluation. However, the licensee had not yet defined what measures would be implemented to ensure that the effectiveness of these corrective measures were reviewed, nor had the licensee completed its extent of condition review.

Inspection Report# : [2000012\(pdf\)](#)

Occupational Radiation Safety



Significance: Mar 31, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

WORKER ENTERED A HIGH RADIATION AREA WITHOUT GETTING RADIATION PROTECTION DEPARTMENT APPROVAL OR BRIEF

Technical Specification Section 15.6.11., Radiation Protection Program, required that an individual entering a high radiation area be under the control of a radiation work permit that includes specification of the radiation dose rates in the immediate work area and other appropriate radiation protection equipment and measures. Contrary to this requirement, during resin transfer operations on February 27, 2001, a laundry decontamination worker entered a high radiation area without getting radiation protection department approval or a brief as required by Radiation Work Permit (RWP) 01-005, Revision 0. This issue was entered in the licensee's corrective action program as CR 01-0611.

Inspection Report# : [2001007\(pdf\)](#)

Public Radiation Safety

Physical Protection

Miscellaneous

Significance: N/A Mar 30, 2001

Identified By: NRC

Item Type: FIN Finding

EFFECTIVE CORRECTIVE ACTION PROGRAM.

The team concluded that the licensee was generally effective at identifying problems and putting them into the corrective action program. There was strong management emphasis on plant staff to identify problems and, overall, a very responsive plant staff. Since 1997, there had been an average of 4200 condition reports written each year. With the large number of condition reports and associated corrective actions, a dated software platform for the corrective action program, and the press of routine and emergent work activities, there was indication of timeliness and quality problems with some aspects of the corrective action program. Examples were identified by the inspectors, consistent with what the licensee had identified, of protracted resolution of problems with the freeze protection system and with discrepancies between the locked status of valves in the plant and the designation as locked in equipment checklists. Examples were also identified where corrective actions for some problems had been incorporated with the resolution of other related problems which were then incorporated with the resolution of yet other problems (that is, by closing corrective action documents to other documents and so on), creating the potential for dilution of the effectiveness of corrective actions for some of the original problems and for unintended extension of due dates for older items. Although there had been some expressed dissatisfaction with some aspects of the corrective action program, the inspectors identified no impediments to a safety conscious work environment.

Inspection Report# : [2001006\(pdf\)](#)

Significance: N/A Dec 31, 2000

Identified By: NRC

Item Type: FIN Finding

CROSS-CUTTING ISSUE FOR PROCEDURE INADEQUACIES.

The inspectors determined that a negative performance trend had developed in several cornerstone areas with procedure inadequacy being the common element based on two examples identified during this reporting period and two previously identified examples of inadequate procedures. All four examples related to the licensee development, technical review, and approval of procedures. While the risk of the individual examples was

very low, the licensee had failed to ensure that procedures were correct prior to being approved for use. These findings collectively indicated a problem with the licensee's human performance in the area of procedure development, technical review, and approval.

Inspection Report# : [2000017\(pdf\)](#)

Significance: N/A Sep 30, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE EMERGENCY OPERATING PROCEDURE FOR TERMINATING CONTAINMENT SPRAY.

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified during the review of Licensee Event Report 50-266/2000-005-00, "Termination Criteria for Containment Spray in Emergency Operating Procedure Non-Conservative with Safety Analysis Assumptions." This report described a discrepancy with an Emergency Operating Procedure which had the potential to allow operators to prematurely secure containment spray prior to reaching the analyzed draw down level of the refueling water storage tank. The corrective actions were being tracked in the licensee's corrective action program.

Inspection Report# : [2000013\(pdf\)](#)

Significance: N/A May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

NUMEROUS ERRORS IDENTIFIED IN CALCULATIONS.

The inspectors identified errors in the majority of calculations reviewed. These errors, along with those discussed above, indicated that a human performance issue might exist, relating to the depth and adequacy of engineering reviews. The errors constitute a fourth example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Last modified : April 01, 2002

Point Beach 2

Initiating Events

Significance: N/A Nov 02, 2001

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION FOR WHITE PERFORMANCE INDICATOR

This supplemental inspection was performed to assess the licensee's evaluation of the Unplanned Scrams per 7,000 Critical Hours Performance Indicator (PI) for Unit 2 which transitioned from Green to White in the second quarter of 2001. The evaluation was determined to be acceptable. The licensee utilized a structured approach to evaluate the circumstances of the individual plant trips and the collective significance of the four trips to identify potential common causes. The inspector determined that corrective actions for each of the plant trips contributing to the White PI corresponded with the root and contributing causes identified by the root cause evaluations. The corrective actions were either completed or being tracked for completion. In two of the four trips, the corrective action and root cause program established a process for performing assessment reviews to assess the effectiveness of corrective actions. Due to the licensee's acceptable performance in addressing the root and contributing causes of the individual plant trips which contributed to exceeding the licensee response threshold for Unplanned Scrams, the White PI associated with this issue will only be considered in assessing plant performance for a total of four quarters, in accordance with the guidance in IMC 0305, "Operating Reactor Assessment Program."
Inspection Report# : [2001016\(pdf\)](#)

G

Significance: Dec 31, 2000

Identified By: NRC

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UNPLANNED REACTOR VESSEL LEVEL DECREASE DURING COUPLING OF REACTOR COOLANT PUMP.

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Mitigating Systems

Significance: N/A May 05, 2000

Identified By: NRC

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INADEQUATE OPERABILITY DETERMINATIONS.

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Inspection Report# : [2000006\(pdf\)](#)

G

Significance: May 05, 2000

Identified By: NRC

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Inspection Report# : [2000006\(pdf\)](#)



Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERROR IN CALCULATION PUMP NET POSITIVE SUCTION HEAD.

The inspectors identified a fundamental error in calculating pump net positive suction head which basically concluded that the pumps would have adequate suction even if the intake was completely uncovered. The risk significance of this was low because, at the time of the inspection, forebay level was sufficiently high to ensure the pumps were operable. This was the third example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)



Significance: Nov 06, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO TAKE TIMELY CORRECTIVE ACTION REGARDING INADEQUATE CONTROL OF MAINTENANCE ACTIVITIES DURING COLD WEATHER CONDITIONS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action"), in that the licensee failed to take corrective action prior to the onset of freezing temperatures in the fall of 2001 for previously identified problems with the plant's freeze protection system. The finding was considered to be more than minor because the freeze protection system helps to protect safety-related components from freezing and the system's failure could have a credible impact on safety. Because there was no actual failure of safety-related components associated with the mitigating systems cornerstone, the finding is considered to be of very low significance

Inspection Report# : [2001014\(pdf\)](#)



Significance: Sep 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

NO PROCEDURES TO PREVENT EXCESSIVE FOULING OF SERVICE WATER STRAINERS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion V), in that, the licensee failed to provide adequate written instruction to prevent excessive fouling of the service water header strainers. As a result, a condition adverse to quality was self-revealed on September 20, 2001, when auxiliary operators identified, while taking logs, that both the north and south header strainers were excessively fouled. The excessive fouling resulted in the service water system being in a configuration that was beyond design basis analyses. The Non-Cited Violation was considered of low risk significance since, for the plant and environmental conditions at the time of discovery, no actual loss of safety function occurred or would have occurred.

Inspection Report# : [2001013\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: FIN Finding

HUMAN PERFORMANCE CROSS-CUTTING ISSUE DUE TO WEAKNESSES IN FIRE PROTECTION ENGINEERING AREA

The inspectors identified a number of issues which, collectively, indicated that human performance weaknesses existed in the fire protection engineering area.

Inspection Report# : [2001012\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT EMERGENCY LIGHTING TO SUPPORT SAFE SHUTDOWN

The inspectors identified that there was insufficient emergency lighting to support performance of required safe shutdown actions. Specifically, there was insufficient emergency lighting in the Unit 1 and Unit 2 façade areas to support performing confirmatory actions to fail air to the Unit 1 and Unit 2 main steam isolation valves so as to ensure these valves would not spuriously reopen. The failure to have adequate emergency lighting is a violation of 10 CFR Part 50, Appendix R, Section III.J. The finding was greater than minor because a delay in performing safe shutdown actions could occur due to the lack of emergency lighting. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding

was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)



Significance: Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AUXILIARY FEEDWATER PUMP ROOM HALON SYSTEM INADEQUATE

The inspectors identified that the automatic fire suppression system for the auxiliary feedwater pump room was not adequate. The installed fire suppression system was only designed for surface fires and was not designed to provide the necessary soak time for deep-seated fires. However, deep-seated fire hazards had been introduced to the room. The failure to have an adequate automatic suppression system is a violation of 10 CFR Part 50, Appendix R, Section III.G.2. The finding was determined to be greater than minor because the finding involved automatic suppression, a fire protection defense-in-depth element. The finding was determined to be of very low safety significance (Green) because the inspectors were not able to postulate a fire scenario which could sustain a deep-seated fire and damage redundant trains of equipment. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT APPENDIX R FUEL OIL SUPPLY

The inspectors identified that the licensee had failed to maintain a 72-hour fuel supply on-site for generator G-05 relied upon for safe shutdown in the event of a fire. The failure to maintain a 72-hour supply of fuel is a violation of 10 CFR Part 50, Appendix R, Section III.L.3. The finding was greater than minor because the capability to achieve and maintain cold shutdown conditions for 72 hours was not provided. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)



Significance: Sep 28, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSSIBLE SPURIOUS OPENING OF POWER-OPERATED RELIEF VALVE DURING FIRES

10 CFR Part 50, Appendix R, Section III.G.1.a required, in part, that one train of systems necessary to achieve and maintain hot shutdown conditions be free of fire damage. As discussed in LER 50-266/1999-006-00; 50-301/1999-006-00, hot shutdown conditions would not have been able to be maintained during the ensuing plant transient which would have resulted from a stuck open pressurizer PORV (power-operated relief valve).

Inspection Report# : [2001012\(pdf\)](#)



Significance: Aug 07, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INEFFECTIVE CORRECTIVE ACTIONS FOR FAILURE TO FOLLOW TECHNICAL SPECIFICATIONS CONCERNING COMMON CAUSE FAILURE TESTING OF EMERGENCY DIESEL GENERATORS

The inspectors identified that the licensee failed to take effective corrective action to preclude repetition of the failure to comply with Technical Specification limiting condition for operation requirements directing testing of redundant standby emergency diesel generator power supplies within 24 hours. A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified. The finding was of very low safety significance because, in both cases of Technical Specification non-compliance, the redundant standby emergency diesel generators were tested satisfactorily, indicating that no actual loss of safety function occurred.

Inspection Report# : [2001011\(pdf\)](#)



Significance: Jun 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AFW SYSTEM INCORRECTLY RETURNED TO MAINTENANCE RULE (a)(2) STATUS WITHOUT MEETING THE REQUIREMENTS IN THE LICENSEE'S (a)(1) ACTION PLAN

A Non-Cited Violation [of 10 CFR 50.65] was identified for the licensee erroneously returning the auxiliary feedwater system to (a)(2) status prior to meeting licensee established (a)(1) performance goals in December 2000. The licensee's inaccurate monitoring of system unavailability against established (a)(1) unavailability goals was determined to be the cause of the error. Since no actual loss of the safety function of the auxiliary feedwater system occurred, this issue was evaluated as having very low safety significance.

Inspection Report# : [2001010\(pdf\)](#)



Significance: Jun 30, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

USE OF THE STEAM GENERATOR BLOWDOWN ISOLATION INTERLOCK DEFEAT SWITCH COULD RESULT IN LOSS OF SAFETY FUNCTION

Code of Federal Regulations 10 CFR Part 50, Appendix B, Criterion III, "Design Control," requires, in part, that measures be established to assure that the design basis specified in the licensee application be correctly translated into procedures and instructions. Contrary to this requirements, the licensee modified steam generator blowdown isolation circuitry to allow defeating the blowdown isolation function during surveillance testing without considering the design basis requirements of the auxiliary feedwater system to provide the heat removal equivalent feedwater flow, 200 gpm, to each unit necessary for post-accident decay heat removal. This issue has been included in the licensee's corrective action program as CR 01-0108.

Inspection Report# : [2001010\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO PROVIDE DIRECT READINGS OF STEAM GENERATOR 'B' PRESSURE PARAMETER WHICH WAS NECESSARY TO PERFORM SAFE SHUTDOWN FUNCTIONS

10 CFR Part 50, Appendix R, Section III.L.2.d, requires the process monitoring function be capable of providing direct readings of the process variables necessary to perform and control safe shutdown functions. Contrary to the above, the licensee failed to provide direct readings of steam generator 'B' pressure parameter which was necessary to perform safe shutdown functions.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO INSTALL THE FIRE STOPS IN A CONFIGURATION WHICH WOULD PREVENT PROPAGATION OF FIRE FROM ONE REDUNDANT TRAIN TO ANOTHER

10 CFR Part 50, Appendix R, Section III.G.2.b, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards. An exemption to this requirement was granted by the NRC, dated July 3, 1985, which stated that the approved alternative was to install fire stops in the intervening cable trays. Contrary to the above, the licensee failed to install the fire stops in the Unit 1 motor control center room in a configuration which would prevent propagation of fire from one redundant train of charging pump cables to another.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REDUNDANT INSTRUMENT CABLES WERE LOCATED WITHIN 20 FEET OF EACH OTHER IN THE UNITS 1 AND 2 CONTAINMENTS

10 CFR Part 50, Appendix R, Section III.G.2.d, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards inside non-inerted containment. Contrary to the above, redundant cables for several temperature elements and steam generator level instruments were located within 20 feet of each other in the Units 1 and 2 containments.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSTULATED FIRE COULD LEAD TO LOSS OF REDUNDANT TRAINS OF CHARGING PUMPS

10 CFR Part 50, Appendix R, Section III.L.2.b, requires the reactor coolant makeup function be capable of maintaining the reactor coolant level within the level indication in the pressurizer for pressurized water reactors. Contrary to the above, in eight fire zones, the cables associated with volume control tank and reactor water storage tank outlet valves were routed in the same fire areas. There would be insufficient time to take manual actions to prevent failure of charging pumps credited for maintaining reactor coolant level.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REPLACEMENT OF CHARGING PUMP CONTROL POWER FUSE OUTSIDE APPENDIX R DESIGN BASIS

10 CFR Part 50, Appendix R, Section III.G.1, requires that fire protection features be provided for systems important to safe shutdown so that one train of systems necessary to achieve and maintain hot shutdown conditions is free of fire damage. Contrary to the above, the licensee failed to provide redundant fusing to protect the control cable associated with the credited charging pump which was necessary for hot shutdown condition and was not free of fire damage.

Inspection Report# : [2001008\(pdf\)](#)

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

TECHNICAL SPECIFICATION REQUIREMENTS FOR TESTING RPS ACTUATION SYSTEM LOGIC NOT SATISFIED

Technical Specification Table 15.4.1-1, "Minimum Frequencies for Checks, Calibrations, and Test of Instrument Channels," Item 44, "Reactor Protection System and Emergency Safety Feature Actuation System Logic," required monthly testing of Reactor Protection System trips which includes the power range low power trip and the intermediate range high flux trip logics. Contrary to this requirement, a surveillance test requirement was missed when the licensee failed to test the power range low power and the intermediate range high flux trips within 24 hours after reducing power below 10 percent after having operated in excess of 10 percent power for greater than the monthly surveillance test frequency. This issue was entered in the licensee's corrective action program as CR 01-0118.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO COMPLY WITH LIMITING CONDITION FOR OPERATION ACTION STATEMENT TO START REDUNDNT STANDBY

Technical Specification 15.3.7.B.1.g required redundant standby emergency power supplies to be started within 24 hours before or after the normal power supply or emergency power supply to Unit 1 A06/B04 or Unit 2 A05/B03 safeguards busses being taken out-of-service. Contrary to this requirement, the licensee identified that the standby emergency power supply to the Unit 2 A05/B03 was out-of- service for 37 hours without the redundant standby emergency power supply being started. This issue was entered in the licensee's corrective action program as CR 00-3475.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Feb 12, 2001

Identified By: NRC

Item Type: FIN Finding

16 VALVES ON UNIT 2 SI SYSTEM WERE LOCKED CLOSED INSTEAD OF JUST CLOSED.

The inspectors identified that 16 valves in the Unit 2 safety injection system were locked closed instead of just closed as required by plant procedure. The failure to maintain valve position in accordance with applicable plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors, the repetitive nature of locked valve problems, and the failure of previously identified corrective actions constituted extenuating circumstances in accordance with Manual Chapter 0609.

Inspection Report# : [2001003\(pdf\)](#)



Significance: Feb 12, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE CONTROL OF CABLE SPREADING ROOM HIGH ENERGY LINE BREAK BARRIER.

The licensee's quality assurance organization identified that a 4½-inch pipe built into and penetrating a wall of the cable spreading room, used for temporary running of cables into the room, was being controlled as a fire barrier impairment but not as a high-energy line break barrier impairment. The pipe had not been included in the licensee's procedure on high energy line break barriers. The failure to include the 4½" pipe in Administrative Procedure NP 8.4.16, "PBNP [Point Beach Nuclear Plant] High Energy Line Break Barriers," was considered a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements.

Inspection Report# : [2001003\(pdf\)](#)

G

Significance: Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR BYPASSING ALARMS FOR HEAT TRACE CIRCUITS FOR SAFETY-RELATED EQUIPMENT.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that specified actions that inappropriately de-energized heat trace circuits for safety-related equipment when the intent was only to bypass alarms. The finding was of very low safety significance because safety-related equipment was not actually rendered inoperable.

Inspection Report# : [2000017\(pdf\)](#)

G

Significance: Nov 09, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR PRESSURE TEST OF RESIDUAL HEAT REMOVAL VALVE.

On October 11, 2000, the inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that did not require verification of appropriate automatic overpressure protection on hydrostatic pressure test equipment during valve seat leakage testing on Train "B" of the Unit 2 residual heat removal system. This finding was of very low safety significance because procedurally required manual overpressure protection was available during testing and Train "A" of the Unit 2 residual heat removal system was operable.

Inspection Report# : [2000014\(pdf\)](#)**Significance:** N/A Aug 22, 2000

Identified By: NRC

Item Type: FIN Finding

SAFETY INJECTION VALVES NOT LOCKED AS REQUIRED BY PLANT PROCEDURE.

The inspectors identified that 24 valves in the Unit 2 safety injection system were not locked as required by plant procedure. The failure to lock the valves in accordance with plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors and repetitive nature of the locked valve problems constituted extenuating circumstances in accordance with Manual Chapter 0609. This finding was assigned to Unit 2.

Inspection Report# : [2000009\(pdf\)](#)

Barrier Integrity

G

Significance: Nov 09, 2000

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR SHIELDING PLACEMENT IN FRONT OF CONTROL ROOM WINDOWS.

An operating procedure did not provide for timely placement of portable shielding in front of control room windows to ensure accident doses to operator would remain below NRC limits. This was contrary to Criterion V, "Instructions, Procedures, and Drawings," of Appendix B of 10 CFR Part 50, requires that activities affecting quality be prescribed by documented instructions, procedures, or drawings.

Inspection Report# : [2000014\(pdf\)](#)

Emergency Preparedness

Significance: N/A Nov 03, 2000

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION OF WHITE PERFORMANCE INDICATOR.

The licensee's initial evaluations and corrective actions associated with the White alert and notification system (ANS) performance indicator (PI) were not adequate. Following the initial NRC onsite inspection and a parallel review by the licensee's quality assurance staff, the licensee performed a comprehensive root cause evaluation of ANS performance. The inspector determined that this evaluation was thorough and effectively identified the root causes of the siren system performance issues. In addition, the licensee fully determined the technical issue that resulted in siren test failures. As a root cause, the licensee concluded that the siren upgrade project was performed outside of the licensee's normal procurement

process, which would have provided additional quality assurance, software testing and verification, and project oversight. In addition, the staff did not consistently use the licensee's corrective action system to document system failures. The licensee attributed these failures to a "mindset" among the emergency preparedness staff that resulted in the staff using internal processes instead of normal plant processes. In terms of corrective actions, the inspector found that the licensee's final planned corrective actions appeared to address the root causes identified in its evaluation. However, the licensee had not yet defined what measures would be implemented to ensure that the effectiveness of these corrective measures were reviewed, nor had the licensee completed its extent of condition review.

Inspection Report# : [2000012\(pdf\)](#)

Occupational Radiation Safety



Significance: Mar 31, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

WORKER ENTERED A HIGH RADIATION AREA WITHOUT GETTING RADIATION PROTECTION DEPARTMENT APPROVAL OR BRIEF

Technical Specification Section 15.6.11., Radiation Protection Program, required that an individual entering a high radiation area be under the control of a radiation work permit that includes specification of the radiation dose rates in the immediate work area and other appropriate radiation protection equipment and measures. Contrary to this requirement, during resin transfer operations on February 27, 2001, a laundry decontamination worker entered a high radiation area without getting radiation protection department approval or a brief as required by Radiation Work Permit (RWP) 01-005, Revision 0. This issue was entered in the licensee's corrective action program as CR 01-0611.

Inspection Report# : [2001007\(pdf\)](#)

Public Radiation Safety

Physical Protection

Miscellaneous

Significance: N/A May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

NUMEROUS ERRORS IDENTIFIED IN CALCULATIONS.

The inspectors identified errors in the majority of calculations reviewed. These errors, along with those discussed above, indicated that a human performance issue might exist, relating to the depth and adequacy of engineering reviews. The errors constitute a fourth example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Significance: N/A Mar 30, 2001

Identified By: NRC

Item Type: FIN Finding

EFFECTIVE CORRECTIVE ACTION PROGRAM.

The team concluded that the licensee was generally effective at identifying problems and putting them into the corrective action program. There was strong management emphasis on plant staff to identify problems and, overall, a very responsive plant staff. Since 1997, there had been an average of 4200 condition reports written each year. With the large number of condition reports and associated corrective actions, a dated software platform for the corrective action program, and the press of routine and emergent work activities, there was indication of timeliness and quality problems with some aspects of the corrective action program. Examples were identified by the inspectors, consistent with what the licensee had identified, of protracted resolution of problems with the freeze protection system and with discrepancies between the locked status of valves in the plant and the designation as locked in equipment checklists. Examples were also identified where corrective actions for some problems had been incorporated with the resolution of other related problems which were then incorporated with the resolution of yet other problems (that is, by closing corrective action documents to other documents and so on), creating the potential for dilution of the effectiveness of corrective actions for some of the original problems and for unintended extension of due dates for older items. Although there had been some expressed dissatisfaction with some aspects of the corrective action program, the inspectors identified no impediments to a safety conscious work environment.

Inspection Report# : [2001006\(pdf\)](#)

Significance: N/A Dec 31, 2000

Identified By: NRC

Item Type: FIN Finding

CROSS-CUTTING ISSUE FOR PROCEDURE INADEQUACIES.

The inspectors determined that a negative performance trend had developed in several cornerstone areas with procedure inadequacy being the common element based on two examples identified during this reporting period and two previously identified examples of inadequate procedures. All four examples related to the licensee development, technical review, and approval of procedures. While the risk of the individual examples was very low, the licensee had failed to ensure that procedures were correct prior to being approved for use. These findings collectively indicated a problem with the licensee's human performance in the area of procedure development, technical review, and approval.

Inspection Report# : [2000017\(pdf\)](#)

Significance: N/A Sep 30, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE EMERGENCY OPERATING PROCEDURE FOR TERMINATING CONTAINMENT SPRAY.

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified during the review of Licensee Event Report 50-266/2000-005-00, "Termination Criteria for Containment Spray in Emergency Operating Procedure Non-Conservative with Safety Analysis Assumptions." This report described a discrepancy with an Emergency Operating Procedure which had the potential to allow operators to prematurely secure containment spray prior to reaching the analyzed draw down level of the refueling water storage tank. The corrective actions were being tracked in the licensee's corrective action program.

Inspection Report# : [2000013\(pdf\)](#)

Last modified : April 01, 2002

Point Beach 2

Initiating Events

Significance: N/A Nov 02, 2001

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION FOR WHITE PERFORMANCE INDICATOR

This supplemental inspection was performed to assess the licensee's evaluation of the Unplanned Scrams per 7,000 Critical Hours Performance Indicator (PI) for Unit 2 which transitioned from Green to White in the second quarter of 2001. The evaluation was determined to be acceptable. The licensee utilized a structured approach to evaluate the circumstances of the individual plant trips and the collective significance of the four trips to identify potential common causes. The inspector determined that corrective actions for each of the plant trips contributing to the White PI corresponded with the root and contributing causes identified by the root cause evaluations. The corrective actions were either completed or being tracked for completion. In two of the four trips, the corrective action and root cause program established a process for performing assessment reviews to assess the effectiveness of corrective actions. Due to the licensee's acceptable performance in addressing the root and contributing causes of the individual plant trips which contributed to exceeding the licensee response threshold for Unplanned Scrams, the White PI associated with this issue will only be considered in assessing plant performance for a total of four quarters, in accordance with the guidance in IMC 0305, "Operating Reactor Assessment Program."

Inspection Report# : [2001016\(pdf\)](#)

G

Significance: Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

UNPLANNED REACTOR VESSEL LEVEL DECREASE DURING COUPLING OF REACTOR COOLANT PUMP.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure which resulted in an inadvertent decrease in reactor coolant system inventory during reactor coolant pump coupling while in cold shutdown. The finding was of very low safety significance because residual heat removal was not impacted and the amount of water that could have been drained from the reactor coolant system was limited by system configuration and alignment.

Inspection Report# : [2000017\(pdf\)](#)

Mitigating Systems

Significance: N/A Aug 22, 2000

Identified By: NRC

Item Type: FIN Finding

SAFETY INJECTION VALVES NOT LOCKED AS REQUIRED BY PLANT PROCEDURE.

The inspectors identified that 24 valves in the Unit 2 safety injection system were not locked as required by plant procedure. The failure to lock the valves in accordance with plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors and repetitive nature of the locked valve problems constituted extenuating circumstances in accordance with Manual Chapter 0609. This finding was assigned to Unit 2.

Inspection Report# : [2000009\(pdf\)](#)

Significance: N/A May 05, 2000

Identified By: NRC

Item Type: FIN Finding

INADEQUATE OPERABILITY DETERMINATIONS.

The inspectors identified that operability determinations lacked sufficient engineering basis to support continuing operability calls. The licensee was able to show current system operability, given the plant conditions at the time of the inspection.

Inspection Report# : [2000006\(pdf\)](#)

G

Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN CALCULATIONS FOR SERVICE WATER TESTING ACCEPTANCE CRITERIA.

The inspectors identified errors in the calculations providing the uncertainty values for determining the service water inservice testing acceptance criteria. The errors resulted in the lower inservice testing acceptance criteria being below the required design minimum flow. The risk significance of this was low because, at the time of the inspection, all six pumps had flow rates above the minimum acceptance criteria. This issue was considered the first example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

G

Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN SERVICE WATER TEMPERATURE UNCERTAINTY VALUES.

The inspectors identified errors in the service water temperature uncertainty values. This resulted in the control room temperature indications being non-conservatively low. The risk significance of this was low because, at the time of the inspection, lake temperatures were below the design basis maximum. This was the second example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

G

Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERROR IN CALCULATION PUMP NET POSITIVE SUCTION HEAD.

The inspectors identified a fundamental error in calculating pump net positive suction head which basically concluded that the pumps would have adequate suction even if the intake was completely uncovered. The risk significance of this was low because, at the time of the inspection, forebay level was sufficiently high to ensure the pumps were operable. This was the third example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

G

Significance: Nov 06, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO TAKE TIMELY CORRECTIVE ACTION REGARDING INADEQUATE CONTROL OF MAINTENANCE ACTIVITIES DURING COLD WEATHER CONDITIONS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action"), in that the licensee failed to take corrective action prior to the onset of freezing temperatures in the fall of 2001 for previously identified problems with the plant's freeze protection system. The finding was considered to be more than minor because the freeze protection system helps to protect safety-related components from freezing and the system's failure could have a credible impact on safety. Because there was no actual failure of safety-related components associated with the mitigating systems cornerstone, the finding is considered to be of very low significance

Inspection Report# : [2001014\(pdf\)](#)

G

Significance: Sep 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

NO PROCEDURES TO PREVENT EXCESSIVE FOULING OF SERVICE WATER STRAINERS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion V), in that, the licensee failed to provide adequate written instruction to prevent excessive fouling of the service water header strainers. As a result, a condition adverse to quality was self-revealed on September 20, 2001, when auxiliary operators identified, while taking logs, that both the north and south header strainers were excessively fouled. The excessive fouling resulted in the service water system being in a configuration that was beyond design basis analyses. The Non-Cited Violation was considered of low risk significance since, for the plant and environmental conditions at the time of discovery, no actual loss of safety function occurred or would have occurred.

Inspection Report# : [2001013\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: FIN Finding

HUMAN PERFORMANCE CROSS-CUTTING ISSUE DUE TO WEAKNESSES IN FIRE PROTECTION ENGINEERING AREA

The inspectors identified a number of issues which, collectively, indicated that human performance weaknesses existed in the fire protection engineering area.

Inspection Report# : [2001012\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT EMERGENCY LIGHTING TO SUPPORT SAFE SHUTDOWN

The inspectors identified that there was insufficient emergency lighting to support performance of required safe shutdown actions. Specifically, there was insufficient emergency lighting in the Unit 1 and Unit 2 façade areas to support performing confirmatory actions to fail air to the Unit 1 and Unit 2 main steam isolation valves so as to ensure these valves would not spuriously reopen. The failure to have adequate emergency lighting is a violation of 10 CFR Part 50, Appendix R, Section III.J. The finding was greater than minor because a delay in performing safe shutdown actions could occur due to the lack of emergency lighting. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)



Significance: G Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AUXILIARY FEEDWATER PUMP ROOM HALON SYSTEM INADEQUATE

The inspectors identified that the automatic fire suppression system for the auxiliary feedwater pump room was not adequate. The installed fire suppression system was only designed for surface fires and was not designed to provide the necessary soak time for deep-seated fires. However, deep-seated fire hazards had been introduced to the room. The failure to have an adequate automatic suppression system is a violation of 10 CFR Part 50, Appendix R, Section III.G.2. The finding was determined to be greater than minor because the finding involved automatic suppression, a fire protection defense-in-depth element. The finding was determined to be of very low safety significance (Green) because the inspectors were not able to postulate a fire scenario which could sustain a deep-seated fire and damage redundant trains of equipment. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT APPENDIX R FUEL OIL SUPPLY

The inspectors identified that the licensee had failed to maintain a 72-hour fuel supply on-site for generator G-05 relied upon for safe shutdown in the event of a fire. The failure to maintain a 72-hour supply of fuel is a violation of 10 CFR Part 50, Appendix R, Section III.L.3. The finding was greater than minor because the capability to achieve and maintain cold shutdown conditions for 72 hours was not provided. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)



Significance: G Sep 28, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSSIBLE SPURIOUS OPENING OF POWER-OPERATED RELIEF VALVE DURING FIRES

10 CFR Part 50, Appendix R, Section III.G.1.a required, in part, that one train of systems necessary to achieve and maintain hot shutdown conditions be free of fire damage. As discussed in LER 50-266/1999-006-00; 50-301/1999-006-00, hot shutdown conditions would not have been able to be maintained during the ensuing plant transient which would have resulted from a stuck open pressurizer PORV (power-operated relief valve).

Inspection Report# : [2001012\(pdf\)](#)



Significance: G Aug 07, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INEFFECTIVE CORRECTIVE ACTIONS FOR FAILURE TO FOLLOW TECHNICAL SPECIFICATIONS CONCERNING COMMON CAUSE FAILURE TESTING OF EMERGENCY DIESEL GENERATORS

The inspectors identified that the licensee failed to take effective corrective action to preclude repetition of the failure to comply with Technical Specification limiting condition for operation requirements directing testing of redundant standby emergency diesel generator power supplies within 24 hours. A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified. The finding was of very low safety significance because, in both cases of Technical Specification non-compliance, the redundant standby emergency diesel generators were tested satisfactorily, indicating that no actual loss of safety function occurred.

Inspection Report# : [2001011\(pdf\)](#)



Significance: Jun 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AFW SYSTEM INCORRECTLY RETURNED TO MAINTENANCE RULE (a)(2) STATUS WITHOUT MEETING THE REQUIREMENTS IN THE LICENSEE'S (a)(1) ACTION PLAN

A Non-Cited Violation [of 10 CFR 50.65] was identified for the licensee erroneously returning the auxiliary feedwater system to (a)(2) status prior to meeting licensee established (a)(1) performance goals in December 2000. The licensee's inaccurate monitoring of system unavailability against established (a)(1) unavailability goals was determined to be the cause of the error. Since no actual loss of the safety function of the auxiliary feedwater system occurred, this issue was evaluated as having very low safety significance.

Inspection Report# : [2001010\(pdf\)](#)



Significance: Jun 30, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

USE OF THE STEAM GENERATOR BLOWDOWN ISOLATION INTERLOCK DEFEAT SWITCH COULD RESULT IN LOSS OF SAFETY FUNCTION

Code of Federal Regulations 10 CFR Part 50, Appendix B, Criterion III, "Design Control," requires, in part, that measures be established to assure that the design basis specified in the licensee application be correctly translated into procedures and instructions. Contrary to this requirements, the licensee modified steam generator blowdown isolation circuitry to allow defeating the blowdown isolation function during surveillance testing without considering the design basis requirements of the auxiliary feedwater system to provide the heat removal equivalent feedwater flow, 200 gpm, to each unit necessary for post-accident decay heat removal. This issue has been included in the licensee's corrective action program as CR 01-0108.

Inspection Report# : [2001010\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO PROVIDE DIRECT READINGS OF STEAM GENERATOR 'B' PRESSURE PARAMETER WHICH WAS NECESSARY TO PERFORM SAFE SHUTDOWN FUNCTIONS

10 CFR Part 50, Appendix R, Section III.L.2.d, requires the process monitoring function be capable of providing direct readings of the process variables necessary to perform and control safe shutdown functions. Contrary to the above, the licensee failed to provide direct readings of steam generator 'B' pressure parameter which was necessary to perform safe shutdown functions.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO INSTALL THE FIRE STOPS IN A CONFIGURATION WHICH WOULD PREVENT PROPAGATION OF FIRE FROM ONE REDUNDANT TRAIN TO ANOTHER

10 CFR Part 50, Appendix R, Section III.G.2.b, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards. An exemption to this requirement was granted by the NRC, dated July 3, 1985, which stated that the approved alternative was to install fire stops in the intervening cable trays. Contrary to the above, the licensee failed to install the fire stops in the Unit 1 motor control center room in a configuration which would prevent propagation of fire from one redundant train of charging pump cables to another.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REDUNDANT INSTRUMENT CABLES WERE LOCATED WITHIN 20 FEET OF EACH OTHER IN THE UNITS 1 AND 2 CONTAINMENTS

10 CFR Part 50, Appendix R, Section III.G.2.d, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards inside non-inerted containment. Contrary to the above, redundant cables for several temperature elements and steam generator level instruments were located within 20 feet of each other in the

Units 1 and 2 containments.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSTULATED FIRE COULD LEAD TO LOSS OF REDUNDANT TRAINS OF CHARGING PUMPS

10 CFR Part 50, Appendix R, Section III.L.2.b, requires the reactor coolant makeup function be capable of maintaining the reactor coolant level within the level indication in the pressurizer for pressurized water reactors. Contrary to the above, in eight fire zones, the cables associated with volume control tank and reactor water storage tank outlet valves were routed in the same fire areas. There would be insufficient time to take manual actions to prevent failure of charging pumps credited for maintaining reactor coolant level.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REPLACEMENT OF CHARGING PUMP CONTROL POWER FUSE OUTSIDE APPENDIX R DESIGN BASIS

10 CFR Part 50, Appendix R, Section III.G.1, requires that fire protection features be provided for systems important to safe shutdown so that one train of systems necessary to achieve and maintain hot shutdown conditions is free of fire damage. Contrary to the above, the licensee failed to provide redundant fusing to protect the control cable associated with the credited charging pump which was necessary for hot shutdown condition and was not free of fire damage.

Inspection Report# : [2001008\(pdf\)](#)

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

TECHNICAL SPECIFICATION REQUIREMENTS FOR TESTING RPS ACTUATION SYSTEM LOGIC NOT SATISFIED

Technical Specification Table 15.4.1-1, "Minimum Frequencies for Checks, Calibrations, and Test of Instrument Channels," Item 44, "Reactor Protection System and Emergency Safety Feature Actuation System Logic," required monthly testing of Reactor Protection System trips which includes the power range low power trip and the intermediate range high flux trip logics. Contrary to this requirement, a surveillance test requirement was missed when the licensee failed to test the power range low power and the intermediate range high flux trips within 24 hours after reducing power below 10 percent after having operated in excess of 10 percent power for greater than the monthly surveillance test frequency. This issue was entered in the licensee's corrective action program as CR 01-0118.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO COMPLY WITH LIMITING CONDITION FOR OPERATION ACTION STATEMENT TO START REDUNDNT STANDBY

Technical Specification 15.3.7.B.1.g required redundant standby emergency power supplies to be started within 24 hours before or after the normal power supply or emergency power supply to Unit 1 A06/B04 or Unit 2 A05/B03 safeguards busses being taken out-of-service. Contrary to this requirement, the licensee identified that the standby emergency power supply to the Unit 2 A05/B03 was out-of- service for 37 hours without the redundant standby emergency power supply being started. This issue was entered in the licensee's corrective action program as CR 00-3475.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Feb 12, 2001

Identified By: NRC

Item Type: FIN Finding

16 VALVES ON UNIT 2 SI SYSTEM WERE LOCKED CLOSED INSTEAD OF JUST CLOSED.

The inspectors identified that 16 valves in the Unit 2 safety injection system were locked closed instead of just closed as required by plant procedure. The failure to maintain valve position in accordance with applicable plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors, the repetitive nature of locked valve problems, and the failure of previously identified corrective actions constituted extenuating circumstances in accordance with Manual Chapter 0609.

Inspection Report# : [2001003\(pdf\)](#)



Significance: Feb 12, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE CONTROL OF CABLE SPREADING ROOM HIGH ENERGY LINE BREAK BARRIER.

The licensee's quality assurance organization identified that a 4½-inch pipe built into and penetrating a wall of the cable spreading room, used for temporary running of cables into the room, was being controlled as a fire barrier impairment but not as a high-energy line break barrier impairment. The pipe had not been included in the licensee's procedure on high energy line break barriers. The failure to include the 4½" pipe in Administrative Procedure NP 8.4.16, "PBNP [Point Beach Nuclear Plant] High Energy Line Break Barriers," was considered a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements.

Inspection Report# : [2001003\(pdf\)](#)

G

Significance: Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR BYPASSING ALARMS FOR HEAT TRACE CIRCUITS FOR SAFETY-RELATED EQUIPMENT.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that specified actions that inappropriately de-energized heat trace circuits for safety-related equipment when the intent was only to bypass alarms. The finding was of very low safety significance because safety-related equipment was not actually rendered inoperable.

Inspection Report# : [2000017\(pdf\)](#)

G

Significance: Nov 09, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR PRESSURE TEST OF RESIDUAL HEAT REMOVAL VALVE.

On October 11, 2000, the inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that did not require verification of appropriate automatic overpressure protection on hydrostatic pressure test equipment during valve seat leakage testing on Train "B" of the Unit 2 residual heat removal system. This finding was of very low safety significance because procedurally required manual overpressure protection was available during testing and Train "A" of the Unit 2 residual heat removal system was operable.

Inspection Report# : [2000014\(pdf\)](#)

Barrier Integrity

G

Significance: Nov 09, 2000

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR SHIELDING PLACEMENT IN FRONT OF CONTROL ROOM WINDOWS.

An operating procedure did not provide for timely placement of portable shielding in front of control room windows to ensure accident doses to operator would remain below NRC limits. This was contrary to Criterion V, "Instructions, Procedures, and Drawings," of Appendix B of 10 CFR Part 50, requires that activities affecting quality be prescribed by documented instructions, procedures, or drawings.

Inspection Report# : [2000014\(pdf\)](#)

Emergency Preparedness

Significance: N/A Nov 03, 2000

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION OF WHITE PERFORMANCE INDICATOR.

The licensee's initial evaluations and corrective actions associated with the White alert and notification system (ANS) performance indicator (PI) were not adequate. Following the initial NRC onsite inspection and a parallel review by the licensee's quality assurance staff, the licensee performed a comprehensive root cause evaluation of ANS performance. The inspector determined that this evaluation was thorough and effectively identified the root causes of the siren system performance issues. In addition, the licensee fully determined the technical issue that resulted in siren test failures. As a root cause, the licensee concluded that the siren upgrade project was performed outside of the licensee's normal procurement process, which would have provided additional quality assurance, software testing and verification, and project oversight. In addition, the staff did not consistently use the licensee's corrective action system to document system failures. The licensee attributed these failures to a "mindset" among the emergency preparedness staff that resulted in the staff using internal processes instead of normal plant processes. In terms of

corrective actions, the inspector found that the licensee's final planned corrective actions appeared to address the root causes identified in its evaluation. However, the licensee had not yet defined what measures would be implemented to ensure that the effectiveness of these corrective measures were reviewed, nor had the licensee completed its extent of condition review.

Inspection Report# : [2000012\(pdf\)](#)

Occupational Radiation Safety



Significance: Mar 31, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

WORKER ENTERED A HIGH RADIATION AREA WITHOUT GETTING RADIATION PROTECTION DEPARTMENT APPROVAL OR BRIEF

Technical Specification Section 15.6.11., Radiation Protection Program, required that an individual entering a high radiation area be under the control of a radiation work permit that includes specification of the radiation dose rates in the immediate work area and other appropriate radiation protection equipment and measures. Contrary to this requirement, during resin transfer operations on February 27, 2001, a laundry decontamination worker entered a high radiation area without getting radiation protection department approval or a brief as required by Radiation Work Permit (RWP) 01-005, Revision 0. This issue was entered in the licensee's corrective action program as CR 01-0611.

Inspection Report# : [2001007\(pdf\)](#)

Public Radiation Safety

Physical Protection

Miscellaneous

Significance: N/A Sep 30, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE EMERGENCY OPERATING PROCEDURE FOR TERMINATING CONTAINMENT SPRAY.

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified during the review of Licensee Event Report 50-266/2000-005-00, "Termination Criteria for Containment Spray in Emergency Operating Procedure Non-Conservative with Safety Analysis Assumptions." This report described a discrepancy with an Emergency Operating Procedure which had the potential to allow operators to prematurely secure containment spray prior to reaching the analyzed draw down level of the refueling water storage tank. The corrective actions were being tracked in the licensee's corrective action program.

Inspection Report# : [2000013\(pdf\)](#)

Significance: N/A May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

NUMEROUS ERRORS IDENTIFIED IN CALCULATIONS.

The inspectors identified errors in the majority of calculations reviewed. These errors, along with those discussed above, indicated that a human performance issue might exist, relating to the depth and adequacy of engineering reviews. The errors constitute a fourth example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Significance: N/A Mar 30, 2001

Identified By: NRC

Item Type: FIN Finding

EFFECTIVE CORRECTIVE ACTION PROGRAM.

The team concluded that the licensee was generally effective at identifying problems and putting them into the corrective action program. There was strong management emphasis on plant staff to identify problems and, overall, a very responsive plant staff. Since 1997, there had been an

average of 4200 condition reports written each year. With the large number of condition reports and associated corrective actions, a dated software platform for the corrective action program, and the press of routine and emergent work activities, there was indication of timeliness and quality problems with some aspects of the corrective action program. Examples were identified by the inspectors, consistent with what the licensee had identified, of protracted resolution of problems with the freeze protection system and with discrepancies between the locked status of valves in the plant and the designation as locked in equipment checklists. Examples were also identified where corrective actions for some problems had been incorporated with the resolution of other related problems which were then incorporated with the resolution of yet other problems (that is, by closing corrective action documents to other documents and so on), creating the potential for dilution of the effectiveness of corrective actions for some of the original problems and for unintended extension of due dates for older items. Although there had been some expressed dissatisfaction with some aspects of the corrective action program, the inspectors identified no impediments to a safety conscious work environment.

Inspection Report# : [2001006\(pdf\)](#)

Significance: N/A Dec 31, 2000

Identified By: NRC

Item Type: FIN Finding

CROSS-CUTTING ISSUE FOR PROCEDURE INADEQUACIES.

The inspectors determined that a negative performance trend had developed in several cornerstone areas with procedure inadequacy being the common element based on two examples identified during this reporting period and two previously identified examples of inadequate procedures. All four examples related to the licensee development, technical review, and approval of procedures. While the risk of the individual examples was very low, the licensee had failed to ensure that procedures were correct prior to being approved for use. These findings collectively indicated a problem with the licensee's human performance in the area of procedure development, technical review, and approval.

Inspection Report# : [2000017\(pdf\)](#)

Last modified : March 29, 2002

Point Beach 2

Initiating Events

G**Significance:** Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

UNPLANNED REACTOR VESSEL LEVEL DECREASE DURING COUPLING OF REACTOR COOLANT PUMP.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure which resulted in an inadvertent decrease in reactor coolant system inventory during reactor coolant pump coupling while in cold shutdown. The finding was of very low safety significance because residual heat removal was not impacted and the amount of water that could have been drained from the reactor coolant system was limited by system configuration and alignment.

Inspection Report# : [2000017\(pdf\)](#)**Significance:** N/A Nov 02, 2001

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION FOR WHITE PERFORMANCE INDICATOR

This supplemental inspection was performed to assess the licensee's evaluation of the Unplanned Scrams per 7,000 Critical Hours Performance Indicator (PI) for Unit 2 which transitioned from Green to White in the second quarter of 2001. The evaluation was determined to be acceptable.

The licensee utilized a structured approach to evaluate the circumstances of the individual plant trips and the collective significance of the four trips to identify potential common causes. The inspector determined that corrective actions for each of the plant trips contributing to the White PI corresponded with the root and contributing causes identified by the root cause evaluations. The corrective actions were either completed or being tracked for completion. In two of the four trips, the corrective action and root cause program established a process for performing assessment reviews to assess the effectiveness of corrective actions. Due to the licensee's acceptable performance in addressing the root and contributing causes of the individual plant trips which contributed to exceeding the licensee response threshold for Unplanned Scrams, the White PI associated with this issue will only be considered in assessing plant performance for a total of four quarters, in accordance with the guidance in IMC 0305, "Operating Reactor Assessment Program."

Inspection Report# : [2001016\(pdf\)](#)

Mitigating Systems

G**Significance:** Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR BYPASSING ALARMS FOR HEAT TRACE CIRCUITS FOR SAFETY-RELATED EQUIPMENT.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that specified actions that inappropriately de-energized heat trace circuits for safety-related equipment when the intent was only to bypass alarms. The finding was of very low safety significance because safety-related equipment was not actually rendered inoperable.

Inspection Report# : [2000017\(pdf\)](#)G**Significance:** Nov 09, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR PRESSURE TEST OF RESIDUAL HEAT REMOVAL VALVE.

On October 11, 2000, the inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that did not require verification of appropriate automatic overpressure protection on hydrostatic pressure test equipment during valve seat leakage testing on Train "B" of the Unit 2 residual heat removal system. This finding was of very low safety significance because procedurally required manual overpressure protection was available during testing and Train "A" of the Unit 2 residual heat removal system was operable.

Inspection Report# : [2000014\(pdf\)](#)

Significance: N/A Aug 22, 2000

Identified By: NRC

Item Type: FIN Finding

SAFETY INJECTION VALVES NOT LOCKED AS REQUIRED BY PLANT PROCEDURE.

The inspectors identified that 24 valves in the Unit 2 safety injection system were not locked as required by plant procedure. The failure to lock the valves in accordance with plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors and repetitive nature of the locked valve problems constituted extenuating circumstances in accordance with Manual Chapter 0609. This finding was assigned to Unit 2.

Inspection Report# : [2000009\(pdf\)](#)

Significance: N/A May 05, 2000

Identified By: NRC

Item Type: FIN Finding

INADEQUATE OPERABILITY DETERMINATIONS.

The inspectors identified that operability determinations lacked sufficient engineering basis to support continuing operability calls. The licensee was able to show current system operability, given the plant conditions at the time of the inspection.

Inspection Report# : [2000006\(pdf\)](#)



Significance: G May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN CALCULATIONS FOR SERVICE WATER TESTING ACCEPTANCE CRITERIA.

The inspectors identified errors in the calculations providing the uncertainty values for determining the service water inservice testing acceptance criteria. The errors resulted in the lower inservice testing acceptance criteria being below the required design minimum flow. The risk significance of this was low because, at the time of the inspection, all six pumps had flow rates above the minimum acceptance criteria. This issue was considered the first example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)



Significance: G May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN SERVICE WATER TEMPERATURE UNCERTAINTY VALUES.

The inspectors identified errors in the service water temperature uncertainty values. This resulted in the control room temperature indications being non-conservatively low. The risk significance of this was low because, at the time of the inspection, lake temperatures were below the design basis maximum. This was the second example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)



Significance: G May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERROR IN CALCULATION PUMP NET POSITIVE SUCTION HEAD.

The inspectors identified a fundamental error in calculating pump net positive suction head which basically concluded that the pumps would have adequate suction even if the intake was completely uncovered. The risk significance of this was low because, at the time of the inspection, forebay level was sufficiently high to ensure the pumps were operable. This was the third example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)



Significance: G Nov 06, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO TAKE TIMELY CORRECTIVE ACTION REGARDING INADEQUATE CONTROL OF MAINTENANCE ACTIVITIES DURING COLD WEATHER CONDITIONS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action"), in that the licensee failed to take corrective action prior to the onset of freezing temperatures in the fall of 2001 for previously identified problems with the plant's freeze protection system. The finding was considered to be more than minor because the freeze protection system helps to protect safety-related components from freezing and the system's failure could have a credible impact on safety. Because there was no actual failure of safety-related components

associated with the mitigating systems cornerstone, the finding is considered to be of very low significance

Inspection Report# : [2001014\(pdf\)](#)



Significance: G Sep 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

NO PROCEDURES TO PREVENT EXCESSIVE FOULING OF SERVICE WATER STRAINERS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion V), in that, the licensee failed to provide adequate written instruction to prevent excessive fouling of the service water header strainers. As a result, a condition adverse to quality was self-revealed on September 20, 2001, when auxiliary operators identified, while taking logs, that both the north and south header strainers were excessively fouled. The excessive fouling resulted in the service water system being in a configuration that was beyond design basis analyses. The Non-Cited Violation was considered of low risk significance since, for the plant and environmental conditions at the time of discovery, no actual loss of safety function occurred or would have occurred.

Inspection Report# : [2001013\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: FIN Finding

HUMAN PERFORMANCE CROSS-CUTTING ISSUE DUE TO WEAKNESSES IN FIRE PROTECTION ENGINEERING AREA

The inspectors identified a number of issues which, collectively, indicated that human performance weaknesses existed in the fire protection engineering area.

Inspection Report# : [2001012\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT EMERGENCY LIGHTING TO SUPPORT SAFE SHUTDOWN

The inspectors identified that there was insufficient emergency lighting to support performance of required safe shutdown actions. Specifically, there was insufficient emergency lighting in the Unit 1 and Unit 2 façade areas to support performing confirmatory actions to fail air to the Unit 1 and Unit 2 main steam isolation valves so as to ensure these valves would not spuriously reopen. The failure to have adequate emergency lighting is a violation of 10 CFR Part 50, Appendix R, Section III.J. The finding was greater than minor because a delay in performing safe shutdown actions could occur due to the lack of emergency lighting. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)



Significance: G Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AUXILIARY FEEDWATER PUMP ROOM HALON SYSTEM INADEQUATE

The inspectors identified that the automatic fire suppression system for the auxiliary feedwater pump room was not adequate. The installed fire suppression system was only designed for surface fires and was not designed to provide the necessary soak time for deep-seated fires. However, deep-seated fire hazards had been introduced to the room. The failure to have an adequate automatic suppression system is a violation of 10 CFR Part 50, Appendix R, Section III.G.2. The finding was determined to be greater than minor because the finding involved automatic suppression, a fire protection defense-in-depth element. The finding was determined to be of very low safety significance (Green) because the inspectors were not able to postulate a fire scenario which could sustain a deep-seated fire and damage redundant trains of equipment. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT APPENDIX R FUEL OIL SUPPLY

The inspectors identified that the licensee had failed to maintain a 72-hour fuel supply on-site for generator G-05 relied upon for safe shutdown in the event of a fire. The failure to maintain a 72-hour supply of fuel is a violation of 10 CFR Part 50, Appendix R, Section III.L.3. The finding was greater than minor because the capability to achieve and maintain cold shutdown conditions for 72 hours was not provided. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)



Significance: Sep 28, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSSIBLE SPURIOUS OPENING OF POWER-OPERATED RELIEF VALVE DURING FIRES

10 CFR Part 50, Appendix R, Section III.G.1.a required, in part, that one train of systems necessary to achieve and maintain hot shutdown conditions be free of fire damage. As discussed in LER 50-266/1999-006-00; 50-301/1999-006-00, hot shutdown conditions would not have been able to be maintained during the ensuing plant transient which would have resulted from a stuck open pressurizer PORV (power-operated relief valve).

Inspection Report# : [2001012\(pdf\)](#)



Significance: Aug 07, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INEFFECTIVE CORRECTIVE ACTIONS FOR FAILURE TO FOLLOW TECHNICAL SPECIFICATIONS CONCERNING COMMON CAUSE FAILURE TESTING OF EMERGENCY DIESEL GENERATORS

The inspectors identified that the licensee failed to take effective corrective action to preclude repetition of the failure to comply with Technical Specification limiting condition for operation requirements directing testing of redundant standby emergency diesel generator power supplies within 24 hours. A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified. The finding was of very low safety significance because, in both cases of Technical Specification non-compliance, the redundant standby emergency diesel generators were tested satisfactorily, indicating that no actual loss of safety function occurred.

Inspection Report# : [2001011\(pdf\)](#)



Significance: Jun 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AFW SYSTEM INCORRECTLY RETURNED TO MAINTENANCE RULE (a)(2) STATUS WITHOUT MEETING THE REQUIREMENTS IN THE LICENSEE'S (a)(1) ACTION PLAN

A Non-Cited Violation [of 10 CFR 50.65] was identified for the licensee erroneously returning the auxiliary feedwater system to (a)(2) status prior to meeting licensee established (a)(1) performance goals in December 2000. The licensee's inaccurate monitoring of system unavailability against established (a)(1) unavailability goals was determined to be the cause of the error. Since no actual loss of the safety function of the auxiliary feedwater system occurred, this issue was evaluated as having very low safety significance.

Inspection Report# : [2001010\(pdf\)](#)



Significance: Jun 30, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

USE OF THE STEAM GENERATOR BLOWDOWN ISOLATION INTERLOCK DEFEAT SWITCH COULD RESULT IN LOSS OF SAFETY FUNCTION

Code of Federal Regulations 10 CFR Part 50, Appendix B, Criterion III, "Design Control," requires, in part, that measures be established to assure that the design basis specified in the licensee application be correctly translated into procedures and instructions. Contrary to this requirements, the licensee modified steam generator blowdown isolation circuitry to allow defeating the blowdown isolation function during surveillance testing without considering the design basis requirements of the auxiliary feedwater system to provide the heat removal equivalent feedwater flow, 200 gpm, to each unit necessary for post-accident decay heat removal. This issue has been included in the licensee's corrective action program as CR 01-0108.

Inspection Report# : [2001010\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO PROVIDE DIRECT READINGS OF STEAM GENERATOR 'B' PRESSURE PARAMETER WHICH WAS NECESSARY TO PERFORM SAFE SHUTDOWN FUNCTIONS

10 CFR Part 50, Appendix R, Section III.L.2.d, requires the process monitoring function be capable of providing direct readings of the process variables necessary to perform and control safe shutdown functions. Contrary to the above, the licensee failed to provide direct readings of steam

generator 'B' pressure parameter which was necessary to perform safe shutdown functions.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO INSTALL THE FIRE STOPS IN A CONFIGURATION WHICH WOULD PREVENT PROPAGATION OF FIRE FROM ONE REDUNDANT TRAIN TO ANOTHER

10 CFR Part 50, Appendix R, Section III.G.2.b, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards. An exemption to this requirement was granted by the NRC, dated July 3, 1985, which stated that the approved alternative was to install fire stops in the intervening cable trays. Contrary to the above, the licensee failed to install the fire stops in the Unit 1 motor control center room in a configuration which would prevent propagation of fire from one redundant train of charging pump cables to another.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REDUNDANT INSTRUMENT CABLES WERE LOCATED WITHIN 20 FEET OF EACH OTHER IN THE UNITS 1 AND 2 CONTAINMENTS

10 CFR Part 50, Appendix R, Section III.G.2.d, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards inside non-inerted containment. Contrary to the above, redundant cables for several temperature elements and steam generator level instruments were located within 20 feet of each other in the Units 1 and 2 containments.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSTULATED FIRE COULD LEAD TO LOSS OF REDUNDANT TRAINS OF CHARGING PUMPS

10 CFR Part 50, Appendix R, Section III.L.2.b, requires the reactor coolant makeup function be capable of maintaining the reactor coolant level within the level indication in the pressurizer for pressurized water reactors. Contrary to the above, in eight fire zones, the cables associated with volume control tank and reactor water storage tank outlet valves were routed in the same fire areas. There would be insufficient time to take manual actions to prevent failure of charging pumps credited for maintaining reactor coolant level.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REPLACEMENT OF CHARGING PUMP CONTROL POWER FUSE OUTSIDE APPENDIX R DESIGN BASIS

10 CFR Part 50, Appendix R, Section III.G.1, requires that fire protection features be provided for systems important to safe shutdown so that one train of systems necessary to achieve and maintain hot shutdown conditions is free of fire damage. Contrary to the above, the licensee failed to provide redundant fusing to protect the control cable associated with the credited charging pump which was necessary for hot shutdown condition and was not free of fire damage.

Inspection Report# : [2001008\(pdf\)](#)

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

TECHNICAL SPECIFICATION REQUIREMENTS FOR TESTING RPS ACTUATION SYSTEM LOGIC NOT SATISFIED

Technical Specification Table 15.4.1-1, "Minimum Frequencies for Checks, Calibrations, and Test of Instrument Channels," Item 44, "Reactor Protection System and Emergency Safety Feature Actuation System Logic," required monthly testing of Reactor Protection System trips which includes the power range low power trip and the intermediate range high flux trip logics. Contrary to this requirement, a surveillance test requirement was missed when the licensee failed to test the power range low power and the intermediate range high flux trips within 24 hours after reducing power below 10 percent after having operated in excess of 10 percent power for greater than the monthly surveillance test frequency. This issue was entered in the licensee's corrective action program as CR 01-0118.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO COMPLY WITH LIMITING CONDITION FOR OPERATION ACTION STATEMENT TO START REDUNDNT STANDBY

Technical Specification 15.3.7.B.1.g required redundant standby emergency power supplies to be started within 24 hours before or after the normal power supply or emergency power supply to Unit 1 A06/B04 or Unit 2 A05/B03 safeguards busses being taken out-of-service. Contrary to this requirement, the licensee identified that the standby emergency power supply to the Unit 2 A05/B03 was out-of- service for 37 hours without the redundant standby emergency power supply being started. This issue was entered in the licensee's corrective action program as CR 00-3475.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Feb 12, 2001

Identified By: NRC

Item Type: FIN Finding

16 VALVES ON UNIT 2 SI SYSTEM WERE LOCKED CLOSED INSTEAD OF JUST CLOSED.

The inspectors identified that 16 valves in the Unit 2 safety injection system were locked closed instead of just closed as required by plant procedure. The failure to maintain valve position in accordance with applicable plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors, the repetitive nature of locked valve problems, and the failure of previously identified corrective actions constituted extenuating circumstances in accordance with Manual Chapter 0609.

Inspection Report# : [2001003\(pdf\)](#)



Significance: Feb 12, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE CONTROL OF CABLE SPREADING ROOM HIGH ENERGY LINE BREAK BARRIER.

The licensee's quality assurance organization identified that a 4½-inch pipe built into and penetrating a wall of the cable spreading room, used for temporary running of cables into the room, was being controlled as a fire barrier impairment but not as a high-energy line break barrier impairment. The pipe had not been included in the licensee's procedure on high energy line break barriers. The failure to include the 4½" pipe in Administrative Procedure NP 8.4.16, "PBNP [Point Beach Nuclear Plant] High Energy Line Break Barriers," was considered a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements.

Inspection Report# : [2001003\(pdf\)](#)

Barrier Integrity



Significance: Nov 09, 2000

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR SHIELDING PLACEMENT IN FRONT OF CONTROL ROOM WINDOWS.

An operating procedure did not provide for timely placement of portable shielding in front of control room windows to ensure accident doses to operator would remain below NRC limits. This was contrary to Criterion V, "Instructions, Procedures, and Drawings," of Appendix B of 10 CFR Part 50, requires that activities affecting quality be prescribed by documented instructions, procedures, or drawings.

Inspection Report# : [2000014\(pdf\)](#)

Emergency Preparedness

Significance: N/A Nov 03, 2000

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION OF WHITE PERFORMANCE INDICATOR.

The licensee's initial evaluations and corrective actions associated with the White alert and notification system (ANS) performance indicator (PI) were not adequate. Following the initial NRC onsite inspection and a parallel review by the licensee's quality assurance staff, the licensee performed a comprehensive root cause evaluation of ANS performance. The inspector determined that this evaluation was thorough and effectively identified the root causes of the siren system performance issues. In addition, the licensee fully determined the technical issue that resulted in siren test failures. As a root cause, the licensee concluded that the siren upgrade project was performed outside of the licensee's normal procurement process, which would have provided additional quality assurance, software testing and verification, and project oversight. In addition, the staff did

not consistently use the licensee's corrective action system to document system failures. The licensee attributed these failures to a "mindset" among the emergency preparedness staff that resulted in the staff using internal processes instead of normal plant processes. In terms of corrective actions, the inspector found that the licensee's final planned corrective actions appeared to address the root causes identified in its evaluation. However, the licensee had not yet defined what measures would be implemented to ensure that the effectiveness of these corrective measures were reviewed, nor had the licensee completed its extent of condition review.

Inspection Report# : [2000012\(pdf\)](#)

Occupational Radiation Safety



Significance: Mar 31, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

WORKER ENTERED A HIGH RADIATION AREA WITHOUT GETTING RADIATION PROTECTION DEPARTMENT APPROVAL OR BRIEF

Technical Specification Section 15.6.11., Radiation Protection Program, required that an individual entering a high radiation area be under the control of a radiation work permit that includes specification of the radiation dose rates in the immediate work area and other appropriate radiation protection equipment and measures. Contrary to this requirement, during resin transfer operations on February 27, 2001, a laundry decontamination worker entered a high radiation area without getting radiation protection department approval or a brief as required by Radiation Work Permit (RWP) 01-005, Revision 0. This issue was entered in the licensee's corrective action program as CR 01-0611.

Inspection Report# : [2001007\(pdf\)](#)

Public Radiation Safety

Physical Protection

Miscellaneous

Significance: N/A Dec 31, 2000

Identified By: NRC

Item Type: FIN Finding

CROSS-CUTTING ISSUE FOR PROCEDURE INADEQUACIES.

The inspectors determined that a negative performance trend had developed in several cornerstone areas with procedure inadequacy being the common element based on two examples identified during this reporting period and two previously identified examples of inadequate procedures. All four examples related to the licensee development, technical review, and approval of procedures. While the risk of the individual examples was very low, the licensee had failed to ensure that procedures were correct prior to being approved for use. These findings collectively indicated a problem with the licensee's human performance in the area of procedure development, technical review, and approval.

Inspection Report# : [2000017\(pdf\)](#)

Significance: N/A Sep 30, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE EMERGENCY OPERATING PROCEDURE FOR TERMINATING CONTAINMENT SPRAY.

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified during the review of Licensee Event Report 50-266/2000-005-00, "Termination Criteria for Containment Spray in Emergency Operating Procedure Non-Conservative with Safety Analysis Assumptions." This report described a discrepancy with an Emergency Operating Procedure which had the potential to allow operators to prematurely secure containment spray prior to reaching the analyzed draw down level of the refueling water storage tank. The corrective actions were being tracked in the licensee's corrective action program.

Inspection Report# : [2000013\(pdf\)](#)

Significance: N/A May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

NUMEROUS ERRORS IDENTIFIED IN CALCULATIONS.

The inspectors identified errors in the majority of calculations reviewed. These errors, along with those discussed above, indicated that a human performance issue might exist, relating to the depth and adequacy of engineering reviews. The errors constitute a fourth example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Significance: N/A Mar 30, 2001

Identified By: NRC

Item Type: FIN Finding

EFFECTIVE CORRECTIVE ACTION PROGRAM.

The team concluded that the licensee was generally effective at identifying problems and putting them into the corrective action program. There was strong management emphasis on plant staff to identify problems and, overall, a very responsive plant staff. Since 1997, there had been an average of 4200 condition reports written each year. With the large number of condition reports and associated corrective actions, a dated software platform for the corrective action program, and the press of routine and emergent work activities, there was indication of timeliness and quality problems with some aspects of the corrective action program. Examples were identified by the inspectors, consistent with what the licensee had identified, of protracted resolution of problems with the freeze protection system and with discrepancies between the locked status of valves in the plant and the designation as locked in equipment checklists. Examples were also identified where corrective actions for some problems had been incorporated with the resolution of other related problems which were then incorporated with the resolution of yet other problems (that is, by closing corrective action documents to other documents and so on), creating the potential for dilution of the effectiveness of corrective actions for some of the original problems and for unintended extension of due dates for older items. Although there had been some expressed dissatisfaction with some aspects of the corrective action program, the inspectors identified no impediments to a safety conscious work environment.

Inspection Report# : [2001006\(pdf\)](#)

Last modified : March 28, 2002

Point Beach 2

Initiating Events



Significance: G Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

UNPLANNED REACTOR VESSEL LEVEL DECREASE DURING COUPLING OF REACTOR COOLANT PUMP.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure which resulted in an inadvertent decrease in reactor coolant system inventory during reactor coolant pump coupling while in cold shutdown. The finding was of very low safety significance because residual heat removal was not impacted and the amount of water that could have been drained from the reactor coolant system was limited by system configuration and alignment.

Inspection Report# : [2000017\(pdf\)](#)

Significance: N/A Nov 02, 2001

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION FOR WHITE PERFORMANCE INDICATOR

This supplemental inspection was performed to assess the licensee's evaluation of the Unplanned Scrams per 7,000 Critical Hours Performance Indicator (PI) for Unit 2 which transitioned from Green to White in the second quarter of 2001. The evaluation was determined to be acceptable.

The licensee utilized a structured approach to evaluate the circumstances of the individual plant trips and the collective significance of the four trips to identify potential common causes. The inspector determined that corrective actions for each of the plant trips contributing to the White PI corresponded with the root and contributing causes identified by the root cause evaluations. The corrective actions were either completed or being tracked for completion. In two of the four trips, the corrective action and root cause program established a process for performing assessment reviews to assess the effectiveness of corrective actions. Due to the licensee's acceptable performance in addressing the root and contributing causes of the individual plant trips which contributed to exceeding the licensee response threshold for Unplanned Scrams, the White PI associated with this issue will only be considered in assessing plant performance for a total of four quarters, in accordance with the guidance in IMC 0305, "Operating Reactor Assessment Program."

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Inspection Report# : [2001016\(pdf\)](#)

Mitigating Systems

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

TECHNICAL SPECIFICATION REQUIREMENTS FOR TESTING RPS ACTUATION SYSTEM LOGIC NOT SATISFIED

Technical Specification Table 15.4.1-1, "Minimum Frequencies for Checks, Calibrations, and Test of Instrument Channels," Item 44, "Reactor Protection System and Emergency Safety Feature Actuation System Logic," required monthly testing of Reactor Protection System trips which includes the power range low power trip and the intermediate range high flux trip logics. Contrary to this requirement, a surveillance test requirement was missed when the licensee failed to test the power range low power and the intermediate range high flux trips within 24 hours after reducing power below 10 percent after having operated in excess of 10 percent power for greater than the monthly surveillance test frequency. This issue was entered in the licensee's corrective action program as CR 01-0118.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO COMPLY WITH LIMITING CONDITION FOR OPERATION ACTION STATEMENT TO START REDUNDNT STANDBY

Technical Specification 15.3.7.B.1.g required redundant standby emergency power supplies to be started within 24 hours before or after the normal power supply or emergency power supply to Unit 1 A06/B04 or Unit 2 A05/B03 safeguards busses being taken out-of-service. Contrary to this requirement, the licensee identified that the standby emergency power supply to the Unit 2 A05/B03 was out-of-service for 37 hours without the redundant standby emergency power supply being started. This issue was entered in the licensee's corrective action program as CR 00-3475.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Feb 12, 2001

Identified By: NRC

Item Type: FIN Finding

16 VALVES ON UNIT 2 SI SYSTEM WERE LOCKED CLOSED INSTEAD OF JUST CLOSED.

The inspectors identified that 16 valves in the Unit 2 safety injection system were locked closed instead of just closed as required by plant procedure. The failure to maintain valve position in accordance with applicable plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors, the repetitive nature of locked valve problems, and the failure of previously identified corrective actions constituted extenuating circumstances in accordance with Manual Chapter 0609.

Inspection Report# : [2001003\(pdf\)](#)



Significance: Feb 12, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE CONTROL OF CABLE SPREADING ROOM HIGH ENERGY LINE BREAK BARRIER.

The licensee's quality assurance organization identified that a 4½-inch pipe built into and penetrating a wall of the cable spreading room, used for temporary running of cables into the room, was being controlled as a fire barrier impairment but not as a high-energy line break barrier impairment. The pipe had not been included in the licensee's procedure on high energy line break barriers. The failure to include the 4½" pipe in Administrative Procedure NP 8.4.16, "PBNP [Point Beach Nuclear Plant] High Energy Line Break Barriers," was considered a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements.

Inspection Report# : [2001003\(pdf\)](#)



Significance: Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR BYPASSING ALARMS FOR HEAT TRACE CIRCUITS FOR SAFETY-RELATED EQUIPMENT.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that specified actions that inappropriately de-energized heat trace circuits for safety-related equipment when the intent was only to bypass alarms. The finding was of very low safety significance because safety-related equipment was not actually rendered inoperable.

Inspection Report# : [2000017\(pdf\)](#)



Significance: Nov 09, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR PRESSURE TEST OF RESIDUAL HEAT REMOVAL VALVE.

On October 11, 2000, the inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that did not require verification of appropriate automatic overpressure protection on hydrostatic pressure test equipment during valve seat leakage testing on Train "B" of the Unit 2 residual heat removal system. This finding was of very low safety significance because procedurally required manual overpressure protection was available during testing and Train "A" of the Unit 2 residual heat removal system was operable.

Inspection Report# : [2000014\(pdf\)](#)

Significance: N/A Aug 22, 2000

Identified By: NRC

Item Type: FIN Finding

SAFETY INJECTION VALVES NOT LOCKED AS REQUIRED BY PLANT PROCEDURE.

The inspectors identified that 24 valves in the Unit 2 safety injection system were not locked as required by plant procedure. The failure to lock the valves in accordance with plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors and repetitive nature of the locked valve problems constituted extenuating circumstances in accordance with Manual Chapter 0609. This finding was assigned to Unit 2.

Inspection Report# : [2000009\(pdf\)](#)

Significance: N/A May 05, 2000

Identified By: NRC

Item Type: FIN Finding

INADEQUATE OPERABILITY DETERMINATIONS.

The inspectors identified that operability determinations lacked sufficient engineering basis to support continuing operability calls. The licensee was able to show current system operability, given the plant conditions at the time of the inspection.

Inspection Report# : [2000006\(pdf\)](#)

G

Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN CALCULATIONS FOR SERVICE WATER TESTING ACCEPTANCE CRITERIA.

The inspectors identified errors in the calculations providing the uncertainty values for determining the service water inservice testing acceptance criteria. The errors resulted in the lower inservice testing acceptance criteria being below the required design minimum flow. The risk significance of this was low because, at the time of the inspection, all six pumps had flow rates above the minimum acceptance criteria. This issue was considered the first example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

G

Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN SERVICE WATER TEMPERATURE UNCERTAINTY VALUES.

The inspectors identified errors in the service water temperature uncertainty values. This resulted in the control room temperature indications being non-conservatively low. The risk significance of this was low because, at the time of the inspection, lake temperatures were below the design basis maximum. This was the second example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

G

Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERROR IN CALCULATION PUMP NET POSITIVE SUCTION HEAD.

The inspectors identified a fundamental error in calculating pump net positive suction head which basically concluded that the pumps would have adequate suction even if the intake was completely uncovered. The risk significance of this was low because, at the time of the inspection, forebay level was sufficiently high to ensure the pumps were operable. This was the third example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

G

Significance: Nov 06, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO TAKE TIMELY CORRECTIVE ACTION REGARDING INADEQUATE CONTROL OF MAINTENANCE ACTIVITIES DURING COLD WEATHER CONDITIONS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action"), in that the licensee failed to take corrective action prior to the onset of freezing temperatures in the fall of 2001 for previously identified problems with the plant's freeze protection system. The finding was considered to be more than minor because the freeze protection system helps to protect safety-related components from freezing and the system's failure could have a credible impact on safety. Because there was no actual failure of safety-related components associated with the mitigating systems cornerstone, the finding is considered to be of very low significance

Inspection Report# : [2001014\(pdf\)](#)

G

Significance: Sep 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

NO PROCEDURES TO PREVENT EXCESSIVE FOULING OF SERVICE WATER STRAINERS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion V), in that, the licensee failed to provide adequate written instruction to prevent excessive fouling of the service water header strainers. As a result, a condition adverse to quality was self-revealed on September 20, 2001, when auxiliary operators identified, while taking logs, that both the north and south header strainers were excessively fouled. The excessive fouling resulted in the service water system being in a configuration that was beyond design basis analyses. The Non-Cited Violation was considered of low risk significance since, for the plant and environmental conditions at the time of discovery, no actual loss of safety function occurred or would have occurred.

Inspection Report# : [2001013\(pdf\)](#)**Significance:** N/A Sep 28, 2001

Identified By: NRC

Item Type: FIN Finding

HUMAN PERFORMANCE CROSS-CUTTING ISSUE DUE TO WEAKNESSES IN FIRE PROTECTION ENGINEERING AREA

The inspectors identified a number of issues which, collectively, indicated that human performance weaknesses existed in the fire protection engineering area.

Inspection Report# : [2001012\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT EMERGENCY LIGHTING TO SUPPORT SAFE SHUTDOWN

The inspectors identified that there was insufficient emergency lighting to support performance of required safe shutdown actions. Specifically, there was insufficient emergency lighting in the Unit 1 and Unit 2 façade areas to support performing confirmatory actions to fail air to the Unit 1 and Unit 2 main steam isolation valves so as to ensure these valves would not spuriously reopen. The failure to have adequate emergency lighting is a violation of 10 CFR Part 50, Appendix R, Section III.J. The finding was greater than minor because a delay in performing safe shutdown actions could occur due to the lack of emergency lighting. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)



Significance: G Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AUXILIARY FEEDWATER PUMP ROOM HALON SYSTEM INADEQUATE

The inspectors identified that the automatic fire suppression system for the auxiliary feedwater pump room was not adequate. The installed fire suppression system was only designed for surface fires and was not designed to provide the necessary soak time for deep-seated fires. However, deep-seated fire hazards had been introduced to the room. The failure to have an adequate automatic suppression system is a violation of 10 CFR Part 50, Appendix R, Section III.G.2. The finding was determined to be greater than minor because the finding involved automatic suppression, a fire protection defense-in-depth element. The finding was determined to be of very low safety significance (Green) because the inspectors were not able to postulate a fire scenario which could sustain a deep-seated fire and damage redundant trains of equipment. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT APPENDIX R FUEL OIL SUPPLY

The inspectors identified that the licensee had failed to maintain a 72-hour fuel supply on-site for generator G-05 relied upon for safe shutdown in the event of a fire. The failure to maintain a 72-hour supply of fuel is a violation of 10 CFR Part 50, Appendix R, Section III.L.3. The finding was greater than minor because the capability to achieve and maintain cold shutdown conditions for 72 hours was not provided. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)



Significance: G Sep 28, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSSIBLE SPURIOUS OPENING OF POWER-OPERATED RELIEF VALVE DURING FIRES

10 CFR Part 50, Appendix R, Section III.G.1.a required, in part, that one train of systems necessary to achieve and maintain hot shutdown conditions be free of fire damage. As discussed in LER 50-266/1999-006-00; 50-301/1999-006-00, hot shutdown conditions would not have been able to be maintained during the ensuing plant transient which would have resulted from a stuck open pressurizer PORV (power-operated relief valve).

Inspection Report# : [2001012\(pdf\)](#)



Significance: G Aug 07, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INEFFECTIVE CORRECTIVE ACTIONS FOR FAILURE TO FOLLOW TECHNICAL SPECIFICATIONS CONCERNING COMMON CAUSE FAILURE TESTING OF EMERGENCY DIESEL GENERATORS

The inspectors identified that the licensee failed to take effective corrective action to preclude repetition of the failure to comply with Technical Specification limiting condition for operation requirements directing testing of redundant standby emergency diesel generator power supplies within 24 hours. A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified. The finding was of very low safety significance because, in both cases of Technical Specification non-compliance, the redundant standby emergency diesel generators were tested satisfactorily, indicating that no actual loss of safety function occurred.

Inspection Report# : [2001011\(pdf\)](#)



Significance: Jun 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AFW SYSTEM INCORRECTLY RETURNED TO MAINTENANCE RULE (a)(2) STATUS WITHOUT MEETING THE REQUIREMENTS IN THE LICENSEE'S (a)(1) ACTION PLAN

A Non-Cited Violation [of 10 CFR 50.65] was identified for the licensee erroneously returning the auxiliary feedwater system to (a)(2) status prior to meeting licensee established (a)(1) performance goals in December 2000. The licensee's inaccurate monitoring of system unavailability against established (a)(1) unavailability goals was determined to be the cause of the error. Since no actual loss of the safety function of the auxiliary feedwater system occurred, this issue was evaluated as having very low safety significance.

Inspection Report# : [2001010\(pdf\)](#)



Significance: Jun 30, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

USE OF THE STEAM GENERATOR BLOWDOWN ISOLATION INTERLOCK DEFEAT SWITCH COULD RESULT IN LOSS OF SAFETY FUNCTION

Code of Federal Regulations 10 CFR Part 50, Appendix B, Criterion III, "Design Control," requires, in part, that measures be established to assure that the design basis specified in the licensee application be correctly translated into procedures and instructions. Contrary to this requirements, the licensee modified steam generator blowdown isolation circuitry to allow defeating the blowdown isolation function during surveillance testing without considering the design basis requirements of the auxiliary feedwater system to provide the heat removal equivalent feedwater flow, 200 gpm, to each unit necessary for post-accident decay heat removal. This issue has been included in the licensee's corrective action program as CR 01-0108.

Inspection Report# : [2001010\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO PROVIDE DIRECT READINGS OF STEAM GENERATOR 'B' PRESSURE PARAMETER WHICH WAS NECESSARY TO PERFORM SAFE SHUTDOWN FUNCTIONS

10 CFR Part 50, Appendix R, Section III.L.2.d, requires the process monitoring function be capable of providing direct readings of the process variables necessary to perform and control safe shutdown functions. Contrary to the above, the licensee failed to provide direct readings of steam generator 'B' pressure parameter which was necessary to perform safe shutdown functions.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO INSTALL THE FIRE STOPS IN A CONFIGURATION WHICH WOULD PREVENT PROPAGATION OF FIRE FROM ONE REDUNDANT TRAIN TO ANOTHER

10 CFR Part 50, Appendix R, Section III.G.2.b, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards. An exemption to this requirement was granted by the NRC, dated July 3, 1985, which stated that the approved alternative was to install fire stops in the intervening cable trays. Contrary to the above, the licensee failed to install the fire stops in the Unit 1 motor control center room in a configuration which would prevent propagation of fire from one redundant train of charging pump cables to another.

Inspection Report# : [2001008\(pdf\)](#)

G

Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REDUNDANT INSTRUMENT CABLES WERE LOCATED WITHIN 20 FEET OF EACH OTHER IN THE UNITS 1 AND 2 CONTAINMENTS

10 CFR Part 50, Appendix R, Section III.G.2.d, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards inside non-inerted containment. Contrary to the above, redundant cables for several temperature elements and steam generator level instruments were located within 20 feet of each other in the Units 1 and 2 containments.

Inspection Report# : [2001008\(pdf\)](#)

G

Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSTULATED FIRE COULD LEAD TO LOSS OF REDUNDANT TRAINS OF CHARGING PUMPS

10 CFR Part 50, Appendix R, Section III.L.2.b, requires the reactor coolant makeup function be capable of maintaining the reactor coolant level within the level indication in the pressurizer for pressurized water reactors. Contrary to the above, in eight fire zones, the cables associated with volume control tank and reactor water storage tank outlet valves were routed in the same fire areas. There would be insufficient time to take manual actions to prevent failure of charging pumps credited for maintaining reactor coolant level.

Inspection Report# : [2001008\(pdf\)](#)

G

Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REPLACEMENT OF CHARGING PUMP CONTROL POWER FUSE OUTSIDE APPENDIX R DESIGN BASIS

10 CFR Part 50, Appendix R, Section III.G.1, requires that fire protection features be provided for systems important to safe shutdown so that one train of systems necessary to achieve and maintain hot shutdown conditions is free of fire damage. Contrary to the above, the licensee failed to provide redundant fusing to protect the control cable associated with the credited charging pump which was necessary for hot shutdown condition and was not free of fire damage.

Inspection Report# : [2001008\(pdf\)](#)

Barrier Integrity

G

Significance: Nov 09, 2000

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR SHIELDING PLACEMENT IN FRONT OF CONTROL ROOM WINDOWS.

An operating procedure did not provide for timely placement of portable shielding in front of control room windows to ensure accident doses to operator would remain below NRC limits. This was contrary to Criterion V, "Instructions, Procedures, and Drawings," of Appendix B of 10 CFR Part 50, requires that activities affecting quality be prescribed by documented instructions, procedures, or drawings.

Inspection Report# : [2000014\(pdf\)](#)

Emergency Preparedness

Significance: N/A Nov 03, 2000

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION OF WHITE PERFORMANCE INDICATOR.

The licensee's initial evaluations and corrective actions associated with the White alert and notification system (ANS) performance indicator (PI) were not adequate. Following the initial NRC onsite inspection and a parallel review by the licensee's quality assurance staff, the licensee performed a comprehensive root cause evaluation of ANS performance. The inspector determined that this evaluation was thorough and effectively identified the root causes of the siren system performance issues. In addition, the licensee fully determined the technical issue that resulted in siren

test failures. As a root cause, the licensee concluded that the siren upgrade project was performed outside of the licensee's normal procurement process, which would have provided additional quality assurance, software testing and verification, and project oversight. In addition, the staff did not consistently use the licensee's corrective action system to document system failures. The licensee attributed these failures to a "mindset" among the emergency preparedness staff that resulted in the staff using internal processes instead of normal plant processes. In terms of corrective actions, the inspector found that the licensee's final planned corrective actions appeared to address the root causes identified in its evaluation. However, the licensee had not yet defined what measures would be implemented to ensure that the effectiveness of these corrective measures were reviewed, nor had the licensee completed its extent of condition review.

Inspection Report# : [2000012\(pdf\)](#)

Occupational Radiation Safety



Significance: Mar 31, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

WORKER ENTERED A HIGH RADIATION AREA WITHOUT GETTING RADIATION PROTECTION DEPARTMENT APPROVAL OR BRIEF

Technical Specification Section 15.6.11., Radiation Protection Program, required that an individual entering a high radiation area be under the control of a radiation work permit that includes specification of the radiation dose rates in the immediate work area and other appropriate radiation protection equipment and measures. Contrary to this requirement, during resin transfer operations on February 27, 2001, a laundry decontamination worker entered a high radiation area without getting radiation protection department approval or a brief as required by Radiation Work Permit (RWP) 01-005, Revision 0. This issue was entered in the licensee's corrective action program as CR 01-0611.

Inspection Report# : [2001007\(pdf\)](#)

Public Radiation Safety

Physical Protection

Miscellaneous

Significance: N/A Mar 30, 2001

Identified By: NRC

Item Type: FIN Finding

EFFECTIVE CORRECTIVE ACTION PROGRAM.

The team concluded that the licensee was generally effective at identifying problems and putting them into the corrective action program. There was strong management emphasis on plant staff to identify problems and, overall, a very responsive plant staff. Since 1997, there had been an average of 4200 condition reports written each year. With the large number of condition reports and associated corrective actions, a dated software platform for the corrective action program, and the press of routine and emergent work activities, there was indication of timeliness and quality problems with some aspects of the corrective action program. Examples were identified by the inspectors, consistent with what the licensee had identified, of protracted resolution of problems with the freeze protection system and with discrepancies between the locked status of valves in the plant and the designation as locked in equipment checklists. Examples were also identified where corrective actions for some problems had been incorporated with the resolution of other related problems which were then incorporated with the resolution of yet other problems (that is, by closing corrective action documents to other documents and so on), creating the potential for dilution of the effectiveness of corrective actions for some of the original problems and for unintended extension of due dates for older items. Although there had been some expressed dissatisfaction with some aspects of the corrective action program, the inspectors identified no impediments to a safety conscious work environment.

Inspection Report# : [2001006\(pdf\)](#)

Significance: N/A Dec 31, 2000

Identified By: NRC

Item Type: FIN Finding

CROSS-CUTTING ISSUE FOR PROCEDURE INADEQUACIES.

The inspectors determined that a negative performance trend had developed in several cornerstone areas with procedure inadequacy being the common element based on two examples identified during this reporting period and two previously identified examples of inadequate procedures.

All four examples related to the licensee development, technical review, and approval of procedures. While the risk of the individual examples was very low, the licensee had failed to ensure that procedures were correct prior to being approved for use. These findings collectively indicated a problem with the licensee's human performance in the area of procedure development, technical review, and approval.

Inspection Report# : [2000017\(pdf\)](#)

Significance: N/A Sep 30, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE EMERGENCY OPERATING PROCEDURE FOR TERMINATING CONTAINMENT SPRAY.

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified during the review of Licensee Event Report 50-266/2000-005-00, "Termination Criteria for Containment Spray in Emergency Operating Procedure Non-Conservative with Safety Analysis Assumptions." This report described a discrepancy with an Emergency Operating Procedure which had the potential to allow operators to prematurely secure containment spray prior to reaching the analyzed draw down level of the refueling water storage tank. The corrective actions were being tracked in the licensee's corrective action program.

Inspection Report# : [2000013\(pdf\)](#)

Significance: N/A May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

NUMEROUS ERRORS IDENTIFIED IN CALCULATIONS.

The inspectors identified errors in the majority of calculations reviewed. These errors, along with those discussed above, indicated that a human performance issue might exist, relating to the depth and adequacy of engineering reviews. The errors constitute a fourth example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Last modified : March 28, 2002

Point Beach 2

Initiating Events



Significance: Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

UNPLANNED REACTOR VESSEL LEVEL DECREASE DURING COUPLING OF REACTOR COOLANT PUMP.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure which resulted in an inadvertent decrease in reactor coolant system inventory during reactor coolant pump coupling while in cold shutdown. The finding was of very low safety significance because residual heat removal was not impacted and the amount of water that could have been drained from the reactor coolant system was limited by system configuration and alignment.

Inspection Report# : [2000017\(pdf\)](#)

Significance: N/A Nov 02, 2001

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION FOR WHITE PERFORMANCE INDICATOR

This supplemental inspection was performed to assess the licensee's evaluation of the Unplanned Scrams per 7,000 Critical Hours Performance Indicator (PI) for Unit 2 which transitioned from Green to White in the second quarter of 2001. The evaluation was determined to be acceptable.

The licensee utilized a structured approach to evaluate the circumstances of the individual plant trips and the collective significance of the four trips to identify potential common causes. The inspector determined that corrective actions for each of the plant trips contributing to the White PI corresponded with the root and contributing causes identified by the root cause evaluations. The corrective actions were either completed or being tracked for completion. In two of the four trips, the corrective action and root cause program established a process for performing assessment reviews to assess the effectiveness of corrective actions. Due to the licensee's acceptable performance in addressing the root and contributing causes of the individual plant trips which contributed to exceeding the licensee response threshold for Unplanned Scrams, the White PI associated with this issue will only be considered in assessing plant performance for a total of four quarters, in accordance with the guidance in IMC 0305, "Operating Reactor Assessment Program."

Inspection Report# : [2001016\(pdf\)](#)

Mitigating Systems



Significance: Jun 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AFW SYSTEM INCORRECTLY RETURNED TO MAINTENANCE RULE (a)(2) STATUS WITHOUT MEETING THE REQUIREMENTS IN THE LICENSEE'S (a)(1) ACTION PLAN

A Non-Cited Violation [of 10 CFR 50.65] was identified for the licensee erroneously returning the auxiliary feedwater system to (a)(2) status prior to meeting licensee established (a)(1) performance goals in December 2000. The licensee's inaccurate monitoring of system unavailability against established (a)(1) unavailability goals was determined to be the cause of the error. Since no actual loss of the safety function of the auxiliary feedwater system occurred, this issue was evaluated as having very low safety significance.

Inspection Report# : [2001010\(pdf\)](#)



Significance: Jun 30, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

USE OF THE STEAM GENERATOR BLOWDOWN ISOLATION INTERLOCK DEFEAT SWITCH COULD RESULT IN LOSS OF SAFETY FUNCTION

Code of Federal Regulations 10 CFR Part 50, Appendix B, Criterion III, "Design Control," requires, in part, that measures be established to assure that the design basis specified in the licensee application be correctly translated into procedures and instructions. Contrary to this requirements, the licensee modified steam generator blowdown isolation circuitry to allow defeating the blowdown isolation function during surveillance testing without considering the design basis requirements of the auxiliary feedwater system to provide the heat removal equivalent feedwater flow, 200 gpm, to each unit necessary for post-accident decay heat removal. This issue has been included in the licensee's corrective action program as CR 01-

0108.

Inspection Report# : [2001010\(pdf\)](#)G**Significance:** May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO PROVIDE DIRECT READINGS OF STEAM GENERATOR 'B' PRESSURE PARAMETER WHICH WAS NECESSARY TO PERFORM SAFE SHUTDOWN FUNCTIONS

10 CFR Part 50, Appendix R, Section III.L.2.d, requires the process monitoring function be capable of providing direct readings of the process variables necessary to perform and control safe shutdown functions. Contrary to the above, the licensee failed to provide direct readings of steam generator 'B' pressure parameter which was necessary to perform safe shutdown functions.

Inspection Report# : [2001008\(pdf\)](#)G**Significance:** May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO INSTALL THE FIRE STOPS IN A CONFIGURATION WHICH WOULD PREVENT PROPAGATION OF FIRE FROM ONE REDUNDANT TRAIN TO ANOTHER

10 CFR Part 50, Appendix R, Section III.G.2.b, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards. An exemption to this requirement was granted by the NRC, dated July 3, 1985, which stated that the approved alternative was to install fire stops in the intervening cable trays. Contrary to the above, the licensee failed to install the fire stops in the Unit 1 motor control center room in a configuration which would prevent propagation of fire from one redundant train of charging pump cables to another.

Inspection Report# : [2001008\(pdf\)](#)G**Significance:** May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REDUNDANT INSTRUMENT CABLES WERE LOCATED WITHIN 20 FEET OF EACH OTHER IN THE UNITS 1 AND 2 CONTAINMENTS

10 CFR Part 50, Appendix R, Section III.G.2.d, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards inside non-inerted containment. Contrary to the above, redundant cables for several temperature elements and steam generator level instruments were located within 20 feet of each other in the Units 1 and 2 containments.

Inspection Report# : [2001008\(pdf\)](#)G**Significance:** May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSTULATED FIRE COULD LEAD TO LOSS OF REDUNDANT TRAINS OF CHARGING PUMPS

10 CFR Part 50, Appendix R, Section III.L.2.b, requires the reactor coolant makeup function be capable of maintaining the reactor coolant level within the level indication in the pressurizer for pressurized water reactors. Contrary to the above, in eight fire zones, the cables associated with volume control tank and reactor water storage tank outlet valves were routed in the same fire areas. There would be insufficient time to take manual actions to prevent failure of charging pumps credited for maintaining reactor coolant level.

Inspection Report# : [2001008\(pdf\)](#)G**Significance:** May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REPLACEMENT OF CHARGING PUMP CONTROL POWER FUSE OUTSIDE APPENDIX R DESIGN BASIS

10 CFR Part 50, Appendix R, Section III.G.1, requires that fire protection features be provided for systems important to safe shutdown so that one train of systems necessary to achieve and maintain hot shutdown conditions is free of fire damage. Contrary to the above, the licensee failed to provide redundant fusing to protect the control cable associated with the credited charging pump which was necessary for hot shutdown condition and was not free of fire damage.

Inspection Report# : [2001008\(pdf\)](#)

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

TECHNICAL SPECIFICATION REQUIREMENTS FOR TESTING RPS ACTUATION SYSTEM LOGIC NOT SATISFIED

Technical Specification Table 15.4.1-1, "Minimum Frequencies for Checks, Calibrations, and Test of Instrument Channels," Item 44, "Reactor Protection System and Emergency Safety Feature Actuation System Logic," required monthly testing of Reactor Protection System trips which includes the power range low power trip and the intermediate range high flux trip logics. Contrary to this requirement, a surveillance test requirement was missed when the licensee failed to test the power range low power and the intermediate range high flux trips within 24 hours after reducing power below 10 percent after having operated in excess of 10 percent power for greater than the monthly surveillance test frequency. This issue was entered in the licensee's corrective action program as CR 01-0118.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO COMPLY WITH LIMITING CONDITION FOR OPERATION ACTION STATEMENT TO START REDUNDNT STANDBY

Technical Specification 15.3.7.B.1.g required redundant standby emergency power supplies to be started within 24 hours before or after the normal power supply or emergency power supply to Unit 1 A06/B04 or Unit 2 A05/B03 safeguards busses being taken out-of-service. Contrary to this requirement, the licensee identified that the standby emergency power supply to the Unit 2 A05/B03 was out-of- service for 37 hours without the redundant standby emergency power supply being started. This issue was entered in the licensee's corrective action program as CR 00-3475.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Feb 12, 2001

Identified By: NRC

Item Type: FIN Finding

16 VALVES ON UNIT 2 SI SYSTEM WERE LOCKED CLOSED INSTEAD OF JUST CLOSED.

The inspectors identified that 16 valves in the Unit 2 safety injection system were locked closed instead of just closed as required by plant procedure. The failure to maintain valve position in accordance with applicable plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors, the repetitive nature of locked valve problems, and the failure of previously identified corrective actions constituted extenuating circumstances in accordance with Manual Chapter 0609.

Inspection Report# : [2001003\(pdf\)](#)



Significance: Feb 12, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE CONTROL OF CABLE SPREADING ROOM HIGH ENERGY LINE BREAK BARRIER.

The licensee's quality assurance organization identified that a 4½-inch pipe built into and penetrating a wall of the cable spreading room, used for temporary running of cables into the room, was being controlled as a fire barrier impairment but not as a high-energy line break barrier impairment. The pipe had not been included in the licensee's procedure on high energy line break barriers. The failure to include the 4½" pipe in Administrative Procedure NP 8.4.16, "PBNP [Point Beach Nuclear Plant] High Energy Line Break Barriers," was considered a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements.

Inspection Report# : [2001003\(pdf\)](#)



Significance: Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR BYPASSING ALARMS FOR HEAT TRACE CIRCUITS FOR SAFETY-RELATED EQUIPMENT.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that specified actions that inappropriately de-energized heat trace circuits for safety-related equipment when the intent was only to bypass alarms. The finding was of very low safety significance because safety-related equipment was not actually rendered inoperable.

Inspection Report# : [2000017\(pdf\)](#)



Significance: Nov 09, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR PRESSURE TEST OF RESIDUAL HEAT REMOVAL VALVE.

On October 11, 2000, the inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that did not require verification of appropriate automatic overpressure protection on hydrostatic pressure

test equipment during valve seat leakage testing on Train "B" of the Unit 2 residual heat removal system. This finding was of very low safety significance because procedurally required manual overpressure protection was available during testing and Train "A" of the Unit 2 residual heat removal system was operable.

Inspection Report# : [2000014\(pdf\)](#)

Significance: N/A Aug 22, 2000

Identified By: NRC

Item Type: FIN Finding

SAFETY INJECTION VALVES NOT LOCKED AS REQUIRED BY PLANT PROCEDURE.

The inspectors identified that 24 valves in the Unit 2 safety injection system were not locked as required by plant procedure. The failure to lock the valves in accordance with plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors and repetitive nature of the locked valve problems constituted extenuating circumstances in accordance with Manual Chapter 0609. This finding was assigned to Unit 2.

Inspection Report# : [2000009\(pdf\)](#)



Significance: G Nov 06, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO TAKE TIMELY CORRECTIVE ACTION REGARDING INADEQUATE CONTROL OF MAINTENANCE ACTIVITIES DURING COLD WEATHER CONDITIONS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action"), in that the licensee failed to take corrective action prior to the onset of freezing temperatures in the fall of 2001 for previously identified problems with the plant's freeze protection system. The finding was considered to be more than minor because the freeze protection system helps to protect safety-related components from freezing and the system's failure could have a credible impact on safety. Because there was no actual failure of safety-related components associated with the mitigating systems cornerstone, the finding is considered to be of very low significance

Inspection Report# : [2001014\(pdf\)](#)



Significance: G Sep 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

NO PROCEDURES TO PREVENT EXCESSIVE FOULING OF SERVICE WATER STRAINERS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion V), in that, the licensee failed to provide adequate written instruction to prevent excessive fouling of the service water header strainers. As a result, a condition adverse to quality was self-revealed on September 20, 2001, when auxiliary operators identified, while taking logs, that both the north and south header strainers were excessively fouled. The excessive fouling resulted in the service water system being in a configuration that was beyond design basis analyses. The Non-Cited Violation was considered of low risk significance since, for the plant and environmental conditions at the time of discovery, no actual loss of safety function occurred or would have occurred.

Inspection Report# : [2001013\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: FIN Finding

HUMAN PERFORMANCE CROSS-CUTTING ISSUE DUE TO WEAKNESSES IN FIRE PROTECTION ENGINEERING AREA

The inspectors identified a number of issues which, collectively, indicated that human performance weaknesses existed in the fire protection engineering area.

Inspection Report# : [2001012\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT EMERGENCY LIGHTING TO SUPPORT SAFE SHUTDOWN

The inspectors identified that there was insufficient emergency lighting to support performance of required safe shutdown actions. Specifically, there was insufficient emergency lighting in the Unit 1 and Unit 2 façade areas to support performing confirmatory actions to fail air to the Unit 1 and Unit 2 main steam isolation valves so as to ensure these valves would not spuriously reopen. The failure to have adequate emergency lighting is a violation of 10 CFR Part 50, Appendix R, Section III.J. The finding was greater than minor because a delay in performing safe shutdown actions could occur due to the lack of emergency lighting. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)

G

Significance: Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AUXILIARY FEEDWATER PUMP ROOM HALON SYSTEM INADEQUATE

The inspectors identified that the automatic fire suppression system for the auxiliary feedwater pump room was not adequate. The installed fire suppression system was only designed for surface fires and was not designed to provide the necessary soak time for deep-seated fires. However, deep-seated fire hazards had been introduced to the room. The failure to have an adequate automatic suppression system is a violation of 10 CFR Part 50, Appendix R, Section III.G.2. The finding was determined to be greater than minor because the finding involved automatic suppression, a fire protection defense-in-depth element. The finding was determined to be of very low safety significance (Green) because the inspectors were not able to postulate a fire scenario which could sustain a deep-seated fire and damage redundant trains of equipment. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)**Significance:** N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT APPENDIX R FUEL OIL SUPPLY

The inspectors identified that the licensee had failed to maintain a 72-hour fuel supply on-site for generator G-05 relied upon for safe shutdown in the event of a fire. The failure to maintain a 72-hour supply of fuel is a violation of 10 CFR Part 50, Appendix R, Section III.L.3. The finding was greater than minor because the capability to achieve and maintain cold shutdown conditions for 72 hours was not provided. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)

G

Significance: Sep 28, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSSIBLE SPURIOUS OPENING OF POWER-OPERATED RELIEF VALVE DURING FIRES

10 CFR Part 50, Appendix R, Section III.G.1.a required, in part, that one train of systems necessary to achieve and maintain hot shutdown conditions be free of fire damage. As discussed in LER 50-266/1999-006-00; 50-301/1999-006-00, hot shutdown conditions would not have been able to be maintained during the ensuing plant transient which would have resulted from a stuck open pressurizer PORV (power-operated relief valve).

Inspection Report# : [2001012\(pdf\)](#)

G

Significance: Aug 07, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INEFFECTIVE CORRECTIVE ACTIONS FOR FAILURE TO FOLLOW TECHNICAL SPECIFICATIONS CONCERNING COMMON CAUSE FAILURE TESTING OF EMERGENCY DIESEL GENERATORS

The inspectors identified that the licensee failed to take effective corrective action to preclude repetition of the failure to comply with Technical Specification limiting condition for operation requirements directing testing of redundant standby emergency diesel generator power supplies within 24 hours. A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified. The finding was of very low safety significance because, in both cases of Technical Specification non-compliance, the redundant standby emergency diesel generators were tested satisfactorily, indicating that no actual loss of safety function occurred.

Inspection Report# : [2001011\(pdf\)](#)**Significance:** N/A May 05, 2000

Identified By: NRC

Item Type: FIN Finding

INADEQUATE OPERABILITY DETERMINATIONS.

The inspectors identified that operability determinations lacked sufficient engineering basis to support continuing operability calls. The licensee was able to show current system operability, given the plant conditions at the time of the inspection.

Inspection Report# : [2000006\(pdf\)](#)

G

Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN CALCULATIONS FOR SERVICE WATER TESTING ACCEPTANCE CRITERIA.

The inspectors identified errors in the calculations providing the uncertainty values for determining the service water inservice testing acceptance criteria. The errors resulted in the lower inservice testing acceptance criteria being below the required design minimum flow. The risk significance of this was low because, at the time of the inspection, all six pumps had flow rates above the minimum acceptance criteria. This issue was considered the first example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)



Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN SERVICE WATER TEMPERATURE UNCERTAINTY VALUES.

The inspectors identified errors in the service water temperature uncertainty values. This resulted in the control room temperature indications being non-conservatively low. The risk significance of this was low because, at the time of the inspection, lake temperatures were below the design basis maximum. This was the second example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)



Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERROR IN CALCULATION PUMP NET POSITIVE SUCTION HEAD.

The inspectors identified a fundamental error in calculating pump net positive suction head which basically concluded that the pumps would have adequate suction even if the intake was completely uncovered. The risk significance of this was low because, at the time of the inspection, forebay level was sufficiently high to ensure the pumps were operable. This was the third example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Barrier Integrity



Significance: Nov 09, 2000

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR SHIELDING PLACEMENT IN FRONT OF CONTROL ROOM WINDOWS.

An operating procedure did not provide for timely placement of portable shielding in front of control room windows to ensure accident doses to operator would remain below NRC limits. This was contrary to Criterion V, "Instructions, Procedures, and Drawings," of Appendix B of 10 CFR Part 50, requires that activities affecting quality be prescribed by documented instructions, procedures, or drawings.

Inspection Report# : [2000014\(pdf\)](#)

Emergency Preparedness

Significance: N/A Nov 03, 2000

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION OF WHITE PERFORMANCE INDICATOR.

The licensee's initial evaluations and corrective actions associated with the White alert and notification system (ANS) performance indicator (PI) were not adequate. Following the initial NRC onsite inspection and a parallel review by the licensee's quality assurance staff, the licensee performed a comprehensive root cause evaluation of ANS performance. The inspector determined that this evaluation was thorough and effectively identified the root causes of the siren system performance issues. In addition, the licensee fully determined the technical issue that resulted in siren test failures. As a root cause, the licensee concluded that the siren upgrade project was performed outside of the licensee's normal procurement process, which would have provided additional quality assurance, software testing and verification, and project oversight. In addition, the staff did not consistently use the licensee's corrective action system to document system failures. The licensee attributed these failures to a "mindset" among the emergency preparedness staff that resulted in the staff using internal processes instead of normal plant processes. In terms of

corrective actions, the inspector found that the licensee's final planned corrective actions appeared to address the root causes identified in its evaluation. However, the licensee had not yet defined what measures would be implemented to ensure that the effectiveness of these corrective measures were reviewed, nor had the licensee completed its extent of condition review.

Inspection Report# : [2000012\(pdf\)](#)

Occupational Radiation Safety



Significance: Mar 31, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

WORKER ENTERED A HIGH RADIATION AREA WITHOUT GETTING RADIATION PROTECTION DEPARTMENT APPROVAL OR BRIEF

Technical Specification Section 15.6.11., Radiation Protection Program, required that an individual entering a high radiation area be under the control of a radiation work permit that includes specification of the radiation dose rates in the immediate work area and other appropriate radiation protection equipment and measures. Contrary to this requirement, during resin transfer operations on February 27, 2001, a laundry decontamination worker entered a high radiation area without getting radiation protection department approval or a brief as required by Radiation Work Permit (RWP) 01-005, Revision 0. This issue was entered in the licensee's corrective action program as CR 01-0611.

Inspection Report# : [2001007\(pdf\)](#)

Public Radiation Safety

Physical Protection

Miscellaneous

Significance: N/A Mar 30, 2001

Identified By: NRC

Item Type: FIN Finding

EFFECTIVE CORRECTIVE ACTION PROGRAM.

The team concluded that the licensee was generally effective at identifying problems and putting them into the corrective action program. There was strong management emphasis on plant staff to identify problems and, overall, a very responsive plant staff. Since 1997, there had been an average of 4200 condition reports written each year. With the large number of condition reports and associated corrective actions, a dated software platform for the corrective action program, and the press of routine and emergent work activities, there was indication of timeliness and quality problems with some aspects of the corrective action program. Examples were identified by the inspectors, consistent with what the licensee had identified, of protracted resolution of problems with the freeze protection system and with discrepancies between the locked status of valves in the plant and the designation as locked in equipment checklists. Examples were also identified where corrective actions for some problems had been incorporated with the resolution of other related problems which were then incorporated with the resolution of yet other problems (that is, by closing corrective action documents to other documents and so on), creating the potential for dilution of the effectiveness of corrective actions for some of the original problems and for unintended extension of due dates for older items. Although there had been some expressed dissatisfaction with some aspects of the corrective action program, the inspectors identified no impediments to a safety conscious work environment.

Inspection Report# : [2001006\(pdf\)](#)

Significance: N/A Dec 31, 2000

Identified By: NRC

Item Type: FIN Finding

CROSS-CUTTING ISSUE FOR PROCEDURE INADEQUACIES.

The inspectors determined that a negative performance trend had developed in several cornerstone areas with procedure inadequacy being the common element based on two examples identified during this reporting period and two previously identified examples of inadequate procedures. All four examples related to the licensee development, technical review, and approval of procedures. While the risk of the individual examples was very low, the licensee had failed to ensure that procedures were correct prior to being approved for use. These findings collectively indicated a problem with the licensee's human performance in the area of procedure development, technical review, and approval.

Inspection Report# : [2000017\(pdf\)](#)

Significance: N/A Sep 30, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE EMERGENCY OPERATING PROCEDURE FOR TERMINATING CONTAINMENT SPRAY.

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified during the review of Licensee Event Report 50-266/2000-005-00, "Termination Criteria for Containment Spray in Emergency Operating Procedure Non-Conservative with Safety Analysis Assumptions." This report described a discrepancy with an Emergency Operating Procedure which had the potential to allow operators to prematurely secure containment spray prior to reaching the analyzed draw down level of the refueling water storage tank. The corrective actions were being tracked in the licensee's corrective action program.

Inspection Report# : [2000013\(pdf\)](#)

Significance: N/A May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

NUMEROUS ERRORS IDENTIFIED IN CALCULATIONS.

The inspectors identified errors in the majority of calculations reviewed. These errors, along with those discussed above, indicated that a human performance issue might exist, relating to the depth and adequacy of engineering reviews. The errors constitute a fourth example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Last modified : March 27, 2002

Point Beach 2

Initiating Events

G**Significance:** Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

UNPLANNED REACTOR VESSEL LEVEL DECREASE DURING COUPLING OF REACTOR COOLANT PUMP.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure which resulted in an inadvertent decrease in reactor coolant system inventory during reactor coolant pump coupling while in cold shutdown. The finding was of very low safety significance because residual heat removal was not impacted and the amount of water that could have been drained from the reactor coolant system was limited by system configuration and alignment.

Inspection Report# : [2000017\(pdf\)](#)**Significance:** N/A Nov 02, 2001

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION FOR WHITE PERFORMANCE INDICATOR

This supplemental inspection was performed to assess the licensee's evaluation of the Unplanned Scrams per 7,000 Critical Hours Performance Indicator (PI) for Unit 2 which transitioned from Green to White in the second quarter of 2001. The evaluation was determined to be acceptable.

The licensee utilized a structured approach to evaluate the circumstances of the individual plant trips and the collective significance of the four trips to identify potential common causes. The inspector determined that corrective actions for each of the plant trips contributing to the White PI corresponded with the root and contributing causes identified by the root cause evaluations. The corrective actions were either completed or being tracked for completion. In two of the four trips, the corrective action and root cause program established a process for performing assessment reviews to assess the effectiveness of corrective actions. Due to the licensee's acceptable performance in addressing the root and contributing causes of the individual plant trips which contributed to exceeding the licensee response threshold for Unplanned Scrams, the White PI associated with this issue will only be considered in assessing plant performance for a total of four quarters, in accordance with the guidance in IMC 0305, "Operating Reactor Assessment Program."

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Inspection Report# : [2001016\(pdf\)](#)

Mitigating Systems

G**Significance:** Sep 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

NO PROCEDURES TO PREVENT EXCESSIVE FOULING OF SERVICE WATER STRAINERS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion V), in that, the licensee failed to provide adequate written instruction to prevent excessive fouling of the service water header strainers. As a result, a condition adverse to quality was self-revealed on September 20, 2001, when auxiliary operators identified, while taking logs, that both the north and south header strainers were excessively fouled.

The excessive fouling resulted in the service water system being in a configuration that was beyond design basis analyses. The Non-Cited Violation was considered of low risk significance since, for the plant and environmental conditions at the time of discovery, no actual loss of safety function occurred or would have occurred.

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Inspection Report# : [2001013\(pdf\)](#)**Significance:** N/A Sep 28, 2001

Identified By: NRC

Item Type: FIN Finding

HUMAN PERFORMANCE CROSS-CUTTING ISSUE DUE TO WEAKNESSES IN FIRE PROTECTION ENGINEERING AREA

The inspectors identified a number of issues which, collectively, indicated that human performance weaknesses existed in the fire protection engineering area.

Inspection Report# : [2001012\(pdf\)](#)**Significance:** N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT EMERGENCY LIGHTING TO SUPPORT SAFE SHUTDOWN

The inspectors identified that there was insufficient emergency lighting to support performance of required safe shutdown actions. Specifically, there was insufficient emergency lighting in the Unit 1 and Unit 2 façade areas to support performing confirmatory actions to fail air to the Unit 1 and Unit 2 main steam isolation valves so as to ensure these valves would not spuriously reopen. The failure to have adequate emergency lighting is a violation of 10 CFR Part 50, Appendix R, Section III.J. The finding was greater than minor because a delay in performing safe shutdown actions could occur due to the lack of emergency lighting. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)



Significance: G Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AUXILIARY FEEDWATER PUMP ROOM HALON SYSTEM INADEQUATE

The inspectors identified that the automatic fire suppression system for the auxiliary feedwater pump room was not adequate. The installed fire suppression system was only designed for surface fires and was not designed to provide the necessary soak time for deep-seated fires. However, deep-seated fire hazards had been introduced to the room. The failure to have an adequate automatic suppression system is a violation of 10 CFR Part 50, Appendix R, Section III.G.2. The finding was determined to be greater than minor because the finding involved automatic suppression, a fire protection defense-in-depth element. The finding was determined to be of very low safety significance (Green) because the inspectors were not able to postulate a fire scenario which could sustain a deep-seated fire and damage redundant trains of equipment. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT APPENDIX R FUEL OIL SUPPLY

The inspectors identified that the licensee had failed to maintain a 72-hour fuel supply on-site for generator G-05 relied upon for safe shutdown in the event of a fire. The failure to maintain a 72-hour supply of fuel is a violation of 10 CFR Part 50, Appendix R, Section III.L.3. The finding was greater than minor because the capability to achieve and maintain cold shutdown conditions for 72 hours was not provided. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)



Significance: G Sep 28, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSSIBLE SPURIOUS OPENING OF POWER-OPERATED RELIEF VALVE DURING FIRES

10 CFR Part 50, Appendix R, Section III.G.1.a required, in part, that one train of systems necessary to achieve and maintain hot shutdown conditions be free of fire damage. As discussed in LER 50-266/1999-006-00; 50-301/1999-006-00, hot shutdown conditions would not have been able to be maintained during the ensuing plant transient which would have resulted from a stuck open pressurizer PORV (power-operated relief valve).

Inspection Report# : [2001012\(pdf\)](#)



Significance: G Aug 07, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INEFFECTIVE CORRECTIVE ACTIONS FOR FAILURE TO FOLLOW TECHNICAL SPECIFICATIONS CONCERNING COMMON CAUSE FAILURE TESTING OF EMERGENCY DIESEL GENERATORS

The inspectors identified that the licensee failed to take effective corrective action to preclude repetition of the failure to comply with Technical Specification limiting condition for operation requirements directing testing of redundant standby emergency diesel generator power supplies within 24 hours. A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified. The finding was of very low safety significance because, in both cases of Technical Specification non-compliance, the redundant standby emergency diesel generators were tested satisfactorily, indicating that no actual loss of safety function occurred.

Inspection Report# : [2001011\(pdf\)](#)

G**Significance:** Jun 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AFW SYSTEM INCORRECTLY RETURNED TO MAINTENANCE RULE (a)(2) STATUS WITHOUT MEETING THE REQUIREMENTS IN THE LICENSEE'S (a)(1) ACTION PLAN

A Non-Cited Violation [of 10 CFR 50.65] was identified for the licensee erroneously returning the auxiliary feedwater system to (a)(2) status prior to meeting licensee established (a)(1) performance goals in December 2000. The licensee's inaccurate monitoring of system unavailability against established (a)(1) unavailability goals was determined to be the cause of the error. Since no actual loss of the safety function of the auxiliary feedwater system occurred, this issue was evaluated as having very low safety significance.

Inspection Report# : [2001010\(pdf\)](#)G**Significance:** Jun 30, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

USE OF THE STEAM GENERATOR BLOWDOWN ISOLATION INTERLOCK DEFEAT SWITCH COULD RESULT IN LOSS OF SAFETY FUNCTION

Code of Federal Regulations 10 CFR Part 50, Appendix B, Criterion III, "Design Control," requires, in part, that measures be established to assure that the design basis specified in the licensee application be correctly translated into procedures and instructions. Contrary to this requirements, the licensee modified steam generator blowdown isolation circuitry to allow defeating the blowdown isolation function during surveillance testing without considering the design basis requirements of the auxiliary feedwater system to provide the heat removal equivalent feedwater flow, 200 gpm, to each unit necessary for post-accident decay heat removal. This issue has been included in the licensee's corrective action program as CR 01-0108.

Inspection Report# : [2001010\(pdf\)](#)G**Significance:** May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO PROVIDE DIRECT READINGS OF STEAM GENERATOR 'B' PRESSURE PARAMETER WHICH WAS NECESSARY TO PERFORM SAFE SHUTDOWN FUNCTIONS

10 CFR Part 50, Appendix R, Section III.L.2.d, requires the process monitoring function be capable of providing direct readings of the process variables necessary to perform and control safe shutdown functions. Contrary to the above, the licensee failed to provide direct readings of steam generator 'B' pressure parameter which was necessary to perform safe shutdown functions.

Inspection Report# : [2001008\(pdf\)](#)G**Significance:** May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO INSTALL THE FIRE STOPS IN A CONFIGURATION WHICH WOULD PREVENT PROPAGATION OF FIRE FROM ONE REDUNDANT TRAIN TO ANOTHER

10 CFR Part 50, Appendix R, Section III.G.2.b, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards. An exemption to this requirement was granted by the NRC, dated July 3, 1985, which stated that the approved alternative was to install fire stops in the intervening cable trays. Contrary to the above, the licensee failed to install the fire stops in the Unit 1 motor control center room in a configuration which would prevent propagation of fire from one redundant train of charging pump cables to another.

Inspection Report# : [2001008\(pdf\)](#)G**Significance:** May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REDUNDANT INSTRUMENT CABLES WERE LOCATED WITHIN 20 FEET OF EACH OTHER IN THE UNITS 1 AND 2 CONTAINMENTS

10 CFR Part 50, Appendix R, Section III.G.2.d, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards inside non-inerted containment. Contrary to the above, redundant cables for several temperature elements and steam generator level instruments were located within 20 feet of each other in the Units 1 and 2 containments.

Inspection Report# : [2001008\(pdf\)](#)

G

Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSTULATED FIRE COULD LEAD TO LOSS OF REDUNDANT TRAINS OF CHARGING PUMPS

10 CFR Part 50, Appendix R, Section III.L.2.b, requires the reactor coolant makeup function be capable of maintaining the reactor coolant level within the level indication in the pressurizer for pressurized water reactors. Contrary to the above, in eight fire zones, the cables associated with volume control tank and reactor water storage tank outlet valves were routed in the same fire areas. There would be insufficient time to take manual actions to prevent failure of charging pumps credited for maintaining reactor coolant level.

Inspection Report# : [2001008\(pdf\)](#)

G

Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REPLACEMENT OF CHARGING PUMP CONTROL POWER FUSE OUTSIDE APPENDIX R DESIGN BASIS

10 CFR Part 50, Appendix R, Section III.G.1, requires that fire protection features be provided for systems important to safe shutdown so that one train of systems necessary to achieve and maintain hot shutdown conditions is free of fire damage. Contrary to the above, the licensee failed to provide redundant fusing to protect the control cable associated with the credited charging pump which was necessary for hot shutdown condition and was not free of fire damage.

Inspection Report# : [2001008\(pdf\)](#)**Significance:** N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

TECHNICAL SPECIFICATION REQUIREMENTS FOR TESTING RPS ACTUATION SYSTEM LOGIC NOT SATISFIED

Technical Specification Table 15.4.1-1, "Minimum Frequencies for Checks, Calibrations, and Test of Instrument Channels," Item 44, "Reactor Protection System and Emergency Safety Feature Actuation System Logic," required monthly testing of Reactor Protection System trips which includes the power range low power trip and the intermediate range high flux trip logics. Contrary to this requirement, a surveillance test requirement was missed when the licensee failed to test the power range low power and the intermediate range high flux trips within 24 hours after reducing power below 10 percent after having operated in excess of 10 percent power for greater than the monthly surveillance test frequency. This issue was entered in the licensee's corrective action program as CR 01-0118.

Inspection Report# : [2001007\(pdf\)](#)**Significance:** N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO COMPLY WITH LIMITING CONDITION FOR OPERATION ACTION STATEMENT TO START REDUNDNT STANDBY

Technical Specification 15.3.7.B.1.g required redundant standby emergency power supplies to be started within 24 hours before or after the normal power supply or emergency power supply to Unit 1 A06/B04 or Unit 2 A05/B03 safeguards busses being taken out-of-service. Contrary to this requirement, the licensee identified that the standby emergency power supply to the Unit 2 A05/B03 was out-of- service for 37 hours without the redundant standby emergency power supply being started. This issue was entered in the licensee's corrective action program as CR 00-3475.

Inspection Report# : [2001007\(pdf\)](#)**Significance:** N/A Feb 12, 2001

Identified By: NRC

Item Type: FIN Finding

16 VALVES ON UNIT 2 SI SYSTEM WERE LOCKED CLOSED INSTEAD OF JUST CLOSED.

The inspectors identified that 16 valves in the Unit 2 safety injection system were locked closed instead of just closed as required by plant procedure. The failure to maintain valve position in accordance with applicable plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors, the repetitive nature of locked valve problems, and the failure of previously identified corrective actions constituted extenuating circumstances in accordance with Manual Chapter 0609.

Inspection Report# : [2001003\(pdf\)](#)

G

Significance: Feb 12, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE CONTROL OF CABLE SPREADING ROOM HIGH ENERGY LINE BREAK BARRIER.

The licensee's quality assurance organization identified that a 4½-inch pipe built into and penetrating a wall of the cable spreading room, used for temporary running of cables into the room, was being controlled as a fire barrier impairment but not as a high-energy line break barrier impairment.

The pipe had not been included in the licensee's procedure on high energy line break barriers. The failure to include the 4½" pipe in Administrative Procedure NP 8.4.16, "PBNP [Point Beach Nuclear Plant] High Energy Line Break Barriers," was considered a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements.

Inspection Report# : [2001003\(pdf\)](#)

G

Significance: Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR BYPASSING ALARMS FOR HEAT TRACE CIRCUITS FOR SAFETY-RELATED EQUIPMENT.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that specified actions that inappropriately de-energized heat trace circuits for safety-related equipment when the intent was only to bypass alarms. The finding was of very low safety significance because safety-related equipment was not actually rendered inoperable.

Inspection Report# : [2000017\(pdf\)](#)

G

Significance: Nov 09, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR PRESSURE TEST OF RESIDUAL HEAT REMOVAL VALVE.

On October 11, 2000, the inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that did not require verification of appropriate automatic overpressure protection on hydrostatic pressure test equipment during valve seat leakage testing on Train "B" of the Unit 2 residual heat removal system. This finding was of very low safety significance because procedurally required manual overpressure protection was available during testing and Train "A" of the Unit 2 residual heat removal system was operable.

Inspection Report# : [2000014\(pdf\)](#)

G

Significance: Nov 06, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO TAKE TIMELY CORRECTIVE ACTION REGARDING INADEQUATE CONTROL OF MAINTENANCE ACTIVITIES DURING COLD WEATHER CONDITIONS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action"), in that the licensee failed to take corrective action prior to the onset of freezing temperatures in the fall of 2001 for previously identified problems with the plant's freeze protection system. The finding was considered to be more than minor because the freeze protection system helps to protect safety-related components from freezing and the system's failure could have a credible impact on safety. Because there was no actual failure of safety-related components associated with the mitigating systems cornerstone, the finding is considered to be of very low significance

Inspection Report# : [2001014\(pdf\)](#)

Significance: N/A Aug 22, 2000

Identified By: NRC

Item Type: FIN Finding

SAFETY INJECTION VALVES NOT LOCKED AS REQUIRED BY PLANT PROCEDURE.

The inspectors identified that 24 valves in the Unit 2 safety injection system were not locked as required by plant procedure. The failure to lock the valves in accordance with plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors and repetitive nature of the locked valve problems constituted extenuating circumstances in accordance with Manual Chapter 0609. This finding was assigned to Unit 2.

Inspection Report# : [2000009\(pdf\)](#)

Significance: N/A May 05, 2000

Identified By: NRC

Item Type: FIN Finding

INADEQUATE OPERABILITY DETERMINATIONS.

The inspectors identified that operability determinations lacked sufficient engineering basis to support continuing operability calls. The licensee was able to show current system operability, given the plant conditions at the time of the inspection.

Inspection Report# : [2000006\(pdf\)](#)

G

Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN CALCULATIONS FOR SERVICE WATER TESTING ACCEPTANCE CRITERIA.

The inspectors identified errors in the calculations providing the uncertainty values for determining the service water inservice testing acceptance criteria. The errors resulted in the lower inservice testing acceptance criteria being below the required design minimum flow. The risk significance of this was low because, at the time of the inspection, all six pumps had flow rates above the minimum acceptance criteria. This issue was considered the first example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

G

Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN SERVICE WATER TEMPERATURE UNCERTAINTY VALUES.

The inspectors identified errors in the service water temperature uncertainty values. This resulted in the control room temperature indications being non-conservatively low. The risk significance of this was low because, at the time of the inspection, lake temperatures were below the design basis maximum. This was the second example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

G

Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERROR IN CALCULATION PUMP NET POSITIVE SUCTION HEAD.

The inspectors identified a fundamental error in calculating pump net positive suction head which basically concluded that the pumps would have adequate suction even if the intake was completely uncovered. The risk significance of this was low because, at the time of the inspection, forebay level was sufficiently high to ensure the pumps were operable. This was the third example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Barrier Integrity

G

Significance: Nov 09, 2000

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR SHIELDING PLACEMENT IN FRONT OF CONTROL ROOM WINDOWS.

An operating procedure did not provide for timely placement of portable shielding in front of control room windows to ensure accident doses to operator would remain below NRC limits. This was contrary to Criterion V, "Instructions, Procedures, and Drawings," of Appendix B of 10 CFR Part 50, requires that activities affecting quality be prescribed by documented instructions, procedures, or drawings.

Inspection Report# : [2000014\(pdf\)](#)

Emergency Preparedness

Significance: N/A Nov 03, 2000

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION OF WHITE PERFORMANCE INDICATOR.

The licensee's initial evaluations and corrective actions associated with the White alert and notification system (ANS) performance indicator (PI) were not adequate. Following the initial NRC onsite inspection and a parallel review by the licensee's quality assurance staff, the licensee performed a comprehensive root cause evaluation of ANS performance. The inspector determined that this evaluation was thorough and effectively identified the root causes of the siren system performance issues. In addition, the licensee fully determined the technical issue that resulted in siren test failures. As a root cause, the licensee concluded that the siren upgrade project was performed outside of the licensee's normal procurement process, which would have provided additional quality assurance, software testing and verification, and project oversight. In addition, the staff did not consistently use the licensee's corrective action system to document system failures. The licensee attributed these failures to a "mindset" among the emergency preparedness staff that resulted in the staff using internal processes instead of normal plant processes. In terms of

corrective actions, the inspector found that the licensee's final planned corrective actions appeared to address the root causes identified in its evaluation. However, the licensee had not yet defined what measures would be implemented to ensure that the effectiveness of these corrective measures were reviewed, nor had the licensee completed its extent of condition review.

Inspection Report# : [2000012\(pdf\)](#)

Occupational Radiation Safety



Significance: Mar 31, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

WORKER ENTERED A HIGH RADIATION AREA WITHOUT GETTING RADIATION PROTECTION DEPARTMENT APPROVAL OR BRIEF

Technical Specification Section 15.6.11., Radiation Protection Program, required that an individual entering a high radiation area be under the control of a radiation work permit that includes specification of the radiation dose rates in the immediate work area and other appropriate radiation protection equipment and measures. Contrary to this requirement, during resin transfer operations on February 27, 2001, a laundry decontamination worker entered a high radiation area without getting radiation protection department approval or a brief as required by Radiation Work Permit (RWP) 01-005, Revision 0. This issue was entered in the licensee's corrective action program as CR 01-0611.

Inspection Report# : [2001007\(pdf\)](#)

Public Radiation Safety

Physical Protection

Miscellaneous

Significance: N/A Mar 30, 2001

Identified By: NRC

Item Type: FIN Finding

EFFECTIVE CORRECTIVE ACTION PROGRAM.

The team concluded that the licensee was generally effective at identifying problems and putting them into the corrective action program. There was strong management emphasis on plant staff to identify problems and, overall, a very responsive plant staff. Since 1997, there had been an average of 4200 condition reports written each year. With the large number of condition reports and associated corrective actions, a dated software platform for the corrective action program, and the press of routine and emergent work activities, there was indication of timeliness and quality problems with some aspects of the corrective action program. Examples were identified by the inspectors, consistent with what the licensee had identified, of protracted resolution of problems with the freeze protection system and with discrepancies between the locked status of valves in the plant and the designation as locked in equipment checklists. Examples were also identified where corrective actions for some problems had been incorporated with the resolution of other related problems which were then incorporated with the resolution of yet other problems (that is, by closing corrective action documents to other documents and so on), creating the potential for dilution of the effectiveness of corrective actions for some of the original problems and for unintended extension of due dates for older items. Although there had been some expressed dissatisfaction with some aspects of the corrective action program, the inspectors identified no impediments to a safety conscious work environment.

Inspection Report# : [2001006\(pdf\)](#)

Significance: N/A Dec 31, 2000

Identified By: NRC

Item Type: FIN Finding

CROSS-CUTTING ISSUE FOR PROCEDURE INADEQUACIES.

The inspectors determined that a negative performance trend had developed in several cornerstone areas with procedure inadequacy being the common element based on two examples identified during this reporting period and two previously identified examples of inadequate procedures. All four examples related to the licensee development, technical review, and approval of procedures. While the risk of the individual examples was very low, the licensee had failed to ensure that procedures were correct prior to being approved for use. These findings collectively indicated a problem with the licensee's human performance in the area of procedure development, technical review, and approval.

Inspection Report# : [2000017\(pdf\)](#)

Significance: N/A Sep 30, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE EMERGENCY OPERATING PROCEDURE FOR TERMINATING CONTAINMENT SPRAY.

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified during the review of Licensee Event Report 50-266/2000-005-00, "Termination Criteria for Containment Spray in Emergency Operating Procedure Non-Conservative with Safety Analysis Assumptions." This report described a discrepancy with an Emergency Operating Procedure which had the potential to allow operators to prematurely secure containment spray prior to reaching the analyzed draw down level of the refueling water storage tank. The corrective actions were being tracked in the licensee's corrective action program.

Inspection Report# : [2000013\(pdf\)](#)

Significance: N/A May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

NUMEROUS ERRORS IDENTIFIED IN CALCULATIONS.

The inspectors identified errors in the majority of calculations reviewed. These errors, along with those discussed above, indicated that a human performance issue might exist, relating to the depth and adequacy of engineering reviews. The errors constitute a fourth example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Last modified : March 26, 2002

Point Beach 2

Initiating Events

Significance: N/A Nov 02, 2001

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION FOR WHITE PERFORMANCE INDICATOR

This supplemental inspection was performed to assess the licensee's evaluation of the Unplanned Scrams per 7,000 Critical Hours Performance Indicator (PI) for Unit 2 which transitioned from Green to White in the second quarter of 2001. The evaluation was determined to be acceptable. The licensee utilized a structured approach to evaluate the circumstances of the individual plant trips and the collective significance of the four trips to identify potential common causes. The inspector determined that corrective actions for each of the plant trips contributing to the White PI corresponded with the root and contributing causes identified by the root cause evaluations. The corrective actions were either completed or being tracked for completion. In two of the four trips, the corrective action and root cause program established a process for performing assessment reviews to assess the effectiveness of corrective actions. Due to the licensee's acceptable performance in addressing the root and contributing causes of the individual plant trips which contributed to exceeding the licensee response threshold for Unplanned Scrams, the White PI associated with this issue will only be considered in assessing plant performance for a total of four quarters, in accordance with the guidance in IMC 0305, "Operating Reactor Assessment Program."

Inspection Report# : [2001016\(pdf\)](#)

G

Significance: Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

UNPLANNED REACTOR VESSEL LEVEL DECREASE DURING COUPLING OF REACTOR COOLANT PUMP.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure which resulted in an inadvertent decrease in reactor coolant system inventory during reactor coolant pump coupling while in cold shutdown. The finding was of very low safety significance because residual heat removal was not impacted and the amount of water that could have been drained from the reactor coolant system was limited by system configuration and alignment.

Inspection Report# : [2000017\(pdf\)](#)

Mitigating Systems

G

Significance: Nov 06, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO TAKE TIMELY CORRECTIVE ACTION REGARDING INADEQUATE CONTROL OF MAINTENANCE ACTIVITIES DURING COLD WEATHER CONDITIONS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action"), in that the licensee failed to take corrective action prior to the onset of freezing temperatures in the fall of 2001 for previously identified problems with the plant's freeze protection system. The finding was considered to be more than minor because the freeze protection system helps to protect safety-related components from freezing and the system's failure could have a credible impact on safety. Because there was no actual failure of safety-related components associated with the mitigating systems cornerstone, the finding is considered to be of very low significance

Inspection Report# : [2001014\(pdf\)](#)

G

Significance: Sep 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

NO PROCEDURES TO PREVENT EXCESSIVE FOULING OF SERVICE WATER STRAINERS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion V), in that, the licensee failed to provide adequate written instruction to prevent excessive fouling of the service water header strainers. As a result, a condition adverse to quality was self-revealed on September 20, 2001, when auxiliary operators identified, while taking logs, that both the north and south header strainers were excessively fouled. The excessive fouling resulted in the service water system being in a configuration that was beyond design basis analyses. The Non-Cited Violation was considered of low risk significance since, for the plant and environmental conditions at the time of discovery, no actual loss of safety function occurred or would have occurred.

Inspection Report# : [2001013\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: FIN Finding

HUMAN PERFORMANCE CROSS-CUTTING ISSUE DUE TO WEAKNESSES IN FIRE PROTECTION ENGINEERING AREA

The inspectors identified a number of issues which, collectively, indicated that human performance weaknesses existed in the fire protection engineering area.

Inspection Report# : [2001012\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT EMERGENCY LIGHTING TO SUPPORT SAFE SHUTDOWN

The inspectors identified that there was insufficient emergency lighting to support performance of required safe shutdown actions. Specifically, there was insufficient emergency lighting in the Unit 1 and Unit 2 façade areas to support performing confirmatory actions to fail air to the Unit 1 and Unit 2 main steam isolation valves so as to ensure these valves would not spuriously reopen. The failure to have adequate emergency lighting is a violation of 10 CFR Part 50, Appendix R, Section III.J. The finding was greater than minor because a delay in performing safe shutdown actions could occur due to the lack of emergency lighting. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)



Significance: G Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AUXILIARY FEEDWATER PUMP ROOM HALON SYSTEM INADEQUATE

The inspectors identified that the automatic fire suppression system for the auxiliary feedwater pump room was not adequate. The installed fire suppression system was only designed for surface fires and was not designed to provide the necessary soak time for deep-seated fires. However, deep-seated fire hazards had been introduced to the room. The failure to have an adequate automatic suppression system is a violation of 10 CFR Part 50, Appendix R, Section III.G.2. The finding was determined to be greater than minor because the finding involved automatic suppression, a fire protection defense-in-depth element. The finding was determined to be of very low safety significance (Green) because the inspectors were not able to postulate a fire scenario which could sustain a deep-seated fire and damage redundant trains of equipment. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT APPENDIX R FUEL OIL SUPPLY

The inspectors identified that the licensee had failed to maintain a 72-hour fuel supply on-site for generator G-05 relied upon for safe shutdown in the event of a fire. The failure to maintain a 72-hour supply of fuel is a violation of 10 CFR Part 50, Appendix R, Section III.L.3. The finding was greater than minor because the capability to achieve and maintain cold shutdown conditions for 72 hours was not provided. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)



Significance: G Sep 28, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSSIBLE SPURIOUS OPENING OF POWER-OPERATED RELIEF VALVE DURING FIRES

10 CFR Part 50, Appendix R, Section III.G.1.a required, in part, that one train of systems necessary to achieve and maintain hot shutdown conditions be free of fire damage. As discussed in LER 50-266/1999-006-00; 50-301/1999-006-00, hot shutdown conditions would not have been able to be maintained during the ensuing plant transient which would have resulted from a stuck open pressurizer PORV (power-operated relief valve).

Inspection Report# : [2001012\(pdf\)](#)



Significance: G Aug 07, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INEFFECTIVE CORRECTIVE ACTIONS FOR FAILURE TO FOLLOW TECHNICAL SPECIFICATIONS CONCERNING COMMON CAUSE FAILURE TESTING OF EMERGENCY DIESEL GENERATORS

The inspectors identified that the licensee failed to take effective corrective action to preclude repetition of the failure to comply with Technical Specification limiting condition for operation requirements directing testing of redundant standby emergency diesel generator power supplies within 24 hours. A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified. The finding was of very low safety significance because, in both cases of Technical Specification non-compliance, the redundant standby emergency diesel generators were tested satisfactorily, indicating that no actual loss of safety function occurred.

Inspection Report# : [2001011\(pdf\)](#)

G

Significance: Jun 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AFW SYSTEM INCORRECTLY RETURNED TO MAINTENANCE RULE (a)(2) STATUS WITHOUT MEETING THE REQUIREMENTS IN THE LICENSEE'S (a)(1) ACTION PLAN

A Non-Cited Violation [of 10 CFR 50.65] was identified for the licensee erroneously returning the auxiliary feedwater system to (a)(2) status prior to meeting licensee established (a)(1) performance goals in December 2000. The licensee's inaccurate monitoring of system unavailability against established (a)(1) unavailability goals was determined to be the cause of the error. Since no actual loss of the safety function of the auxiliary feedwater system occurred, this issue was evaluated as having very low safety significance.

Inspection Report# : [2001010\(pdf\)](#)

G

Significance: Jun 30, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

USE OF THE STEAM GENERATOR BLOWDOWN ISOLATION INTERLOCK DEFEAT SWITCH COULD RESULT IN LOSS OF SAFETY FUNCTION

Code of Federal Regulations 10 CFR Part 50, Appendix B, Criterion III, "Design Control," requires, in part, that measures be established to assure that the design basis specified in the licensee application be correctly translated into procedures and instructions. Contrary to this requirements, the licensee modified steam generator blowdown isolation circuitry to allow defeating the blowdown isolation function during surveillance testing without considering the design basis requirements of the auxiliary feedwater system to provide the heat removal equivalent feedwater flow, 200 gpm, to each unit necessary for post-accident decay heat removal. This issue has been included in the licensee's corrective action program as CR 01-0108.

Inspection Report# : [2001010\(pdf\)](#)

G

Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO PROVIDE DIRECT READINGS OF STEAM GENERATOR 'B' PRESSURE PARAMETER WHICH WAS NECESSARY TO PERFORM SAFE SHUTDOWN FUNCTIONS

10 CFR Part 50, Appendix R, Section III.L.2.d, requires the process monitoring function be capable of providing direct readings of the process variables necessary to perform and control safe shutdown functions. Contrary to the above, the licensee failed to provide direct readings of steam generator 'B' pressure parameter which was necessary to perform safe shutdown functions.

Inspection Report# : [2001008\(pdf\)](#)

G

Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO INSTALL THE FIRE STOPS IN A CONFIGURATION WHICH WOULD PREVENT PROPAGATION OF FIRE FROM ONE REDUNDANT TRAIN TO ANOTHER

10 CFR Part 50, Appendix R, Section III.G.2.b, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards. An exemption to this requirement was granted by the NRC, dated July 3, 1985, which stated that the approved alternative was to install fire stops in the intervening cable trays. Contrary to the above, the licensee failed to install the fire stops in the Unit 1 motor control center room in a configuration which would prevent propagation of fire from one redundant train of charging pump cables to another.

Inspection Report# : [2001008\(pdf\)](#)

G

Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REDUNDANT INSTRUMENT CABLES WERE LOCATED WITHIN 20 FEET OF EACH OTHER IN THE UNITS 1 AND 2 CONTAINMENTS

10 CFR Part 50, Appendix R, Section III.G.2.d, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards inside non-inerted containment. Contrary to the above, redundant cables for several temperature elements and steam generator level instruments were located within 20 feet of each other in the Units 1 and 2 containments.

Inspection Report# : [2001008\(pdf\)](#)

G

Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSTULATED FIRE COULD LEAD TO LOSS OF REDUNDANT TRAINS OF CHARGING PUMPS

10 CFR Part 50, Appendix R, Section III.L.2.b, requires the reactor coolant makeup function be capable of maintaining the reactor coolant level within the level indication in the pressurizer for pressurized water reactors. Contrary to the above, in eight fire zones, the cables associated with volume control tank and reactor water storage tank outlet valves were routed in the same fire areas. There would be insufficient time to take manual actions to prevent failure of charging pumps credited for maintaining reactor coolant level.

Inspection Report# : [2001008\(pdf\)](#)

G

Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REPLACEMENT OF CHARGING PUMP CONTROL POWER FUSE OUTSIDE APPENDIX R DESIGN BASIS

10 CFR Part 50, Appendix R, Section III.G.1, requires that fire protection features be provided for systems important to safe shutdown so that one train of systems necessary to achieve and maintain hot shutdown conditions is free of fire damage. Contrary to the above, the licensee failed to provide redundant fusing to protect the control cable associated with the credited charging pump which was necessary for hot shutdown condition and was not free of fire damage.

Inspection Report# : [2001008\(pdf\)](#)

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

TECHNICAL SPECIFICATION REQUIREMENTS FOR TESTING RPS ACTUATION SYSTEM LOGIC NOT SATISFIED

Technical Specification Table 15.4.1-1, "Minimum Frequencies for Checks, Calibrations, and Test of Instrument Channels," Item 44, "Reactor Protection System and Emergency Safety Feature Actuation System Logic," required monthly testing of Reactor Protection System trips which includes the power range low power trip and the intermediate range high flux trip logics. Contrary to this requirement, a surveillance test requirement was missed when the licensee failed to test the power range low power and the intermediate range high flux trips within 24 hours after reducing power below 10 percent after having operated in excess of 10 percent power for greater than the monthly surveillance test frequency. This issue was entered in the licensee's corrective action program as CR 01-0118.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO COMPLY WITH LIMITING CONDITION FOR OPERATION ACTION STATEMENT TO START REDUNDNT STANDBY

Technical Specification 15.3.7.B.1.g required redundant standby emergency power supplies to be started within 24 hours before or after the normal power supply or emergency power supply to Unit 1 A06/B04 or Unit 2 A05/B03 safeguards busses being taken out-of-service. Contrary to this requirement, the licensee identified that the standby emergency power supply to the Unit 2 A05/B03 was out-of- service for 37 hours without the redundant standby emergency power supply being started. This issue was entered in the licensee's corrective action program as CR 00-3475.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Feb 12, 2001

Identified By: NRC

Item Type: FIN Finding

16 VALVES ON UNIT 2 SI SYSTEM WERE LOCKED CLOSED INSTEAD OF JUST CLOSED.

The inspectors identified that 16 valves in the Unit 2 safety injection system were locked closed instead of just closed as required by plant procedure. The failure to maintain valve position in accordance with applicable plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors, the repetitive nature of locked valve problems, and the failure of previously identified corrective actions constituted extenuating circumstances in accordance with Manual Chapter 0609.

Inspection Report# : [2001003\(pdf\)](#)

G

Significance: Feb 12, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE CONTROL OF CABLE SPREADING ROOM HIGH ENERGY LINE BREAK BARRIER.

The licensee's quality assurance organization identified that a 4½-inch pipe built into and penetrating a wall of the cable spreading room, used for temporary running of cables into the room, was being controlled as a fire barrier impairment but not as a high-energy line break barrier impairment. The pipe had not been included in the licensee's procedure on high energy line break barriers. The failure to include the 4½" pipe in Administrative Procedure NP 8.4.16, "PBNP [Point Beach Nuclear Plant] High Energy Line Break Barriers," was considered a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements.

Inspection Report# : [2001003\(pdf\)](#)

G

Significance: Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR BYPASSING ALARMS FOR HEAT TRACE CIRCUITS FOR SAFETY-RELATED EQUIPMENT.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that specified actions that inappropriately de-energized heat trace circuits for safety-related equipment when the intent was

only to bypass alarms. The finding was of very low safety significance because safety-related equipment was not actually rendered inoperable.
Inspection Report# : [2000017\(pdf\)](#)

G

Significance: Nov 09, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR PRESSURE TEST OF RESIDUAL HEAT REMOVAL VALVE.

On October 11, 2000, the inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that did not require verification of appropriate automatic overpressure protection on hydrostatic pressure test equipment during valve seat leakage testing on Train "B" of the Unit 2 residual heat removal system. This finding was of very low safety significance because procedurally required manual overpressure protection was available during testing and Train "A" of the Unit 2 residual heat removal system was operable.

Inspection Report# : [2000014\(pdf\)](#)

Significance: N/A Aug 22, 2000

Identified By: NRC

Item Type: FIN Finding

SAFETY INJECTION VALVES NOT LOCKED AS REQUIRED BY PLANT PROCEDURE.

The inspectors identified that 24 valves in the Unit 2 safety injection system were not locked as required by plant procedure. The failure to lock the valves in accordance with plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors and repetitive nature of the locked valve problems constituted extenuating circumstances in accordance with Manual Chapter 0609. This finding was assigned to Unit 2.

Inspection Report# : [2000009\(pdf\)](#)

Significance: N/A May 05, 2000

Identified By: NRC

Item Type: FIN Finding

INADEQUATE OPERABILITY DETERMINATIONS.

The inspectors identified that operability determinations lacked sufficient engineering basis to support continuing operability calls. The licensee was able to show current system operability, given the plant conditions at the time of the inspection.

Inspection Report# : [2000006\(pdf\)](#)

G

Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN CALCULATIONS FOR SERVICE WATER TESTING ACCEPTANCE CRITERIA.

The inspectors identified errors in the calculations providing the uncertainty values for determining the service water inservice testing acceptance criteria. The errors resulted in the lower inservice testing acceptance criteria being below the required design minimum flow. The risk significance of this was low because, at the time of the inspection, all six pumps had flow rates above the minimum acceptance criteria. This issue was considered the first example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

G

Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN SERVICE WATER TEMPERATURE UNCERTAINTY VALUES.

The inspectors identified errors in the service water temperature uncertainty values. This resulted in the control room temperature indications being non-conservatively low. The risk significance of this was low because, at the time of the inspection, lake temperatures were below the design basis maximum. This was the second example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

G

Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERROR IN CALCULATION PUMP NET POSITIVE SUCTION HEAD.

The inspectors identified a fundamental error in calculating pump net positive suction head which basically concluded that the pumps would have adequate suction even if the intake was completely uncovered. The risk significance of this was low because, at the time of the inspection, forebay level was sufficiently high to ensure the pumps were operable. This was the third example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Barrier Integrity

G**Significance:** Nov 09, 2000

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR SHIELDING PLACEMENT IN FRONT OF CONTROL ROOM WINDOWS.

An operating procedure did not provide for timely placement of portable shielding in front of control room windows to ensure accident doses to operator would remain below NRC limits. This was contrary to Criterion V, "Instructions, Procedures, and Drawings," of Appendix B of 10 CFR Part 50, requires that activities affecting quality be prescribed by documented instructions, procedures, or drawings.

Inspection Report# : [2000014\(pdf\)](#)

Emergency Preparedness

Significance: N/A Nov 03, 2000

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION OF WHITE PERFORMANCE INDICATOR.

The licensee's initial evaluations and corrective actions associated with the White alert and notification system (ANS) performance indicator (PI) were not adequate. Following the initial NRC onsite inspection and a parallel review by the licensee's quality assurance staff, the licensee performed a comprehensive root cause evaluation of ANS performance. The inspector determined that this evaluation was thorough and effectively identified the root causes of the siren system performance issues. In addition, the licensee fully determined the technical issue that resulted in siren test failures. As a root cause, the licensee concluded that the siren upgrade project was performed outside of the licensee's normal procurement process, which would have provided additional quality assurance, software testing and verification, and project oversight. In addition, the staff did not consistently use the licensee's corrective action system to document system failures. The licensee attributed these failures to a "mindset" among the emergency preparedness staff that resulted in the staff using internal processes instead of normal plant processes. In terms of corrective actions, the inspector found that the licensee's final planned corrective actions appeared to address the root causes identified in its evaluation. However, the licensee had not yet defined what measures would be implemented to ensure that the effectiveness of these corrective measures were reviewed, nor had the licensee completed its extent of condition review.

Inspection Report# : [2000012\(pdf\)](#)

Occupational Radiation Safety

G**Significance:** Mar 31, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

WORKER ENTERED A HIGH RADIATION AREA WITHOUT GETTING RADIATION PROTECTION DEPARTMENT APPROVAL OR BRIEF

Technical Specification Section 15.6.11., Radiation Protection Program, required that an individual entering a high radiation area be under the control of a radiation work permit that includes specification of the radiation dose rates in the immediate work area and other appropriate radiation protection equipment and measures. Contrary to this requirement, during resin transfer operations on February 27, 2001, a laundry decontamination worker entered a high radiation area without getting radiation protection department approval or a brief as required by Radiation Work Permit (RWP) 01-005, Revision 0. This issue was entered in the licensee's corrective action program as CR 01-0611.

Inspection Report# : [2001007\(pdf\)](#)

Public Radiation Safety

Physical Protection

Miscellaneous

Significance: N/A Mar 30, 2001

Identified By: NRC

Item Type: FIN Finding

EFFECTIVE CORRECTIVE ACTION PROGRAM.

The team concluded that the licensee was generally effective at identifying problems and putting them into the corrective action program. There was strong management emphasis on plant staff to identify problems and, overall, a very responsive plant staff. Since 1997, there had been an average of 4200 condition reports written each year. With the large number of condition reports and associated corrective actions, a dated software platform for the corrective action program, and the press of routine and emergent work activities, there was indication of timeliness and quality problems with some aspects of the corrective action program. Examples were identified by the inspectors, consistent with what the licensee had identified, of protracted resolution of problems with the freeze protection system and with discrepancies between the locked status of valves in the plant and the designation as locked in equipment checklists. Examples were also identified where corrective actions for some problems had been incorporated with the resolution of other related problems which were then incorporated with the resolution of yet other problems (that is, by closing corrective action documents to other documents and so on), creating the potential for dilution of the effectiveness of corrective actions for some of the original problems and for unintended extension of due dates for older items. Although there had been some expressed dissatisfaction with some aspects of the corrective action program, the inspectors identified no impediments to a safety conscious work environment.

Inspection Report# : [2001006\(pdf\)](#)

Significance: N/A Dec 31, 2000

Identified By: NRC

Item Type: FIN Finding

CROSS-CUTTING ISSUE FOR PROCEDURE INADEQUACIES.

The inspectors determined that a negative performance trend had developed in several cornerstone areas with procedure inadequacy being the common element based on two examples identified during this reporting period and two previously identified examples of inadequate procedures. All four examples related to the licensee development, technical review, and approval of procedures. While the risk of the individual examples was very low, the licensee had failed to ensure that procedures were correct prior to being approved for use. These findings collectively indicated a problem with the licensee's human performance in the area of procedure development, technical review, and approval.

Inspection Report# : [2000017\(pdf\)](#)

Significance: N/A Sep 30, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE EMERGENCY OPERATING PROCEDURE FOR TERMINATING CONTAINMENT SPRAY.

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified during the review of Licensee Event Report 50-266/2000-005-00, "Termination Criteria for Containment Spray in Emergency Operating Procedure Non-Conservative with Safety Analysis Assumptions." This report described a discrepancy with an Emergency Operating Procedure which had the potential to allow operators to prematurely secure containment spray prior to reaching the analyzed draw down level of the refueling water storage tank. The corrective actions were being tracked in the licensee's corrective action program.

Inspection Report# : [2000013\(pdf\)](#)

Significance: N/A May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

NUMEROUS ERRORS IDENTIFIED IN CALCULATIONS.

The inspectors identified errors in the majority of calculations reviewed. These errors, along with those discussed above, indicated that a human performance issue might exist, relating to the depth and adequacy of engineering reviews. The errors constitute a fourth example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Last modified : March 01, 2002

Point Beach 2

Initiating Events

Significance: N/A Nov 02, 2001

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION FOR WHITE PERFORMANCE INDICATOR

This supplemental inspection was performed to assess the licensee's evaluation of the Unplanned Scrams per 7,000 Critical Hours Performance Indicator (PI) for Unit 2 which transitioned from Green to White in the second quarter of 2001. The evaluation was determined to be acceptable. The licensee utilized a structured approach to evaluate the circumstances of the individual plant trips and the collective significance of the four trips to identify potential common causes. The inspector determined that corrective actions for each of the plant trips contributing to the White PI corresponded with the root and contributing causes identified by the root cause evaluations. The corrective actions were either completed or being tracked for completion. In two of the four trips, the corrective action and root cause program established a process for performing assessment reviews to assess the effectiveness of corrective actions. Due to the licensee's acceptable performance in addressing the root and contributing causes of the individual plant trips which contributed to exceeding the licensee response threshold for Unplanned Scrams, the White PI associated with this issue will only be considered in assessing plant performance for a total of four quarters, in accordance with the guidance in IMC 0305, "Operating Reactor Assessment Program."

Inspection Report# : [2001016\(pdf\)](#)



Significance: G Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

UNPLANNED REACTOR VESSEL LEVEL DECREASE DURING COUPLING OF REACTOR COOLANT PUMP.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure which resulted in an inadvertent decrease in reactor coolant system inventory during reactor coolant pump coupling while in cold shutdown. The finding was of very low safety significance because residual heat removal was not impacted and the amount of water that could have been drained from the reactor coolant system was limited by system configuration and alignment.

Inspection Report# : [2000017\(pdf\)](#)

Mitigating Systems



Significance: W Feb 25, 2002

Identified By: NRC

Item Type: VIO Violation

2P-15B Safety Injection Pump Failure During Monthly Preventative Maintenance Lubrication Activity

White. Unit 2. On February 20, 2002, the 2P-15B safety injection pump failed, during monthly preventative maintenance bearing lubrication activities, due to gas binding caused by back-leakage of nitrogen-saturated water from a reactor coolant system safety injection accumulator. Despite multiple opportunities to have identified the effects of the leaking accumulator, the licensee's organization did not properly respond to adverse accumulator leakage trends or effectively use industry operating experience to prevent failure of the safety injection pump. As documented in the final significance determination letter dated June 13, 2002, the NRC determined that the failure to take prompt corrective actions to preclude repetition after Point Beach personnel concluded that the safety injection system was susceptible to gas binding and when decreasing trends in the Unit 2 A safety injection accumulator level were identified is a violation of Criterion XVI, "Correction Action," of 10 CFR Part 50, Appendix B.

Inspection Report# : [2002003\(pdf\)](#)

Inspection Report# : [2002005\(pdf\)](#)



Significance: R Dec 13, 2001

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002.

Inspection Report# : [2001017\(pdf\)](#)



Significance: Nov 06, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO TAKE TIMELY CORRECTIVE ACTION REGARDING INADEQUATE CONTROL OF MAINTENANCE ACTIVITIES DURING COLD WEATHER CONDITIONS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action"), in that the licensee failed to take corrective action prior to the onset of freezing temperatures in the fall of 2001 for previously identified problems with the plant's freeze protection system. The finding was considered to be more than minor because the freeze protection system helps to protect safety-related components from freezing and the system's failure could have a credible impact on safety. Because there was no actual failure of safety-related components associated with the mitigating systems cornerstone, the finding is considered to be of very low significance

Inspection Report# : [2001014\(pdf\)](#)



Significance: Sep 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

NO PROCEDURES TO PREVENT EXCESSIVE FOULING OF SERVICE WATER STRAINERS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion V), in that, the licensee failed to provide adequate written instruction to prevent excessive fouling of the service water header strainers. As a result, a condition adverse to quality was self-revealed on September 20, 2001, when auxiliary operators identified, while taking logs, that both the north and south header strainers were excessively fouled. The excessive fouling resulted in the service water system being in a configuration that was beyond design basis analyses. The Non-Cited Violation was considered of low risk significance since, for the plant and environmental conditions at the time of discovery, no actual loss of safety function occurred or would have occurred.

Inspection Report# : [2001013\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: FIN Finding

HUMAN PERFORMANCE CROSS-CUTTING ISSUE DUE TO WEAKNESSES IN FIRE PROTECTION ENGINEERING AREA

The inspectors identified a number of issues which, collectively, indicated that human performance weaknesses existed in the fire protection engineering area.

Inspection Report# : [2001012\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT EMERGENCY LIGHTING TO SUPPORT SAFE SHUTDOWN

The inspectors identified that there was insufficient emergency lighting to support performance of required safe shutdown actions. Specifically, there was insufficient emergency lighting in the Unit 1 and Unit 2 façade areas to support performing confirmatory actions to fail air to the Unit 1 and Unit 2 main steam isolation valves so as to ensure these valves would not spuriously reopen. The failure to have adequate emergency lighting is a violation of 10 CFR Part 50, Appendix R, Section III.J. The finding was greater than minor because a delay in performing safe shutdown actions could occur due to the lack of emergency lighting. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)

**Significance:** Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AUXILIARY FEEDWATER PUMP ROOM HALON SYSTEM INADEQUATE

The inspectors identified that the automatic fire suppression system for the auxiliary feedwater pump room was not adequate. The installed fire suppression system was only designed for surface fires and was not designed to provide the necessary soak time for deep-seated fires. However, deep-seated fire hazards had been introduced to the room. The failure to have an adequate automatic suppression system is a violation of 10 CFR Part 50, Appendix R, Section III.G.2. The finding was determined to be greater than minor because the finding involved automatic suppression, a fire protection defense-in-depth element. The finding was determined to be of very low safety significance (Green) because the inspectors were not able to postulate a fire scenario which could sustain a deep-seated fire and damage redundant trains of equipment. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)**Significance:** N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT APPENDIX R FUEL OIL SUPPLY

The inspectors identified that the licensee had failed to maintain a 72-hour fuel supply on-site for generator G-05 relied upon for safe shutdown in the event of a fire. The failure to maintain a 72-hour supply of fuel is a violation of 10 CFR Part 50, Appendix R, Section III.L.3. The finding was greater than minor because the capability to achieve and maintain cold shutdown conditions for 72 hours was not provided. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)**Significance:** Sep 28, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSSIBLE SPURIOUS OPENING OF POWER-OPERATED RELIEF VALVE DURING FIRES

10 CFR Part 50, Appendix R, Section III.G.1.a required, in part, that one train of systems necessary to achieve and maintain hot shutdown conditions be free of fire damage. As discussed in LER 50-266/1999-006-00; 50-301/1999-006-00, hot shutdown conditions would not have been able to be maintained during the ensuing plant transient which would have resulted from a stuck open pressurizer PORV (power-operated relief valve).

Inspection Report# : [2001012\(pdf\)](#)**Significance:** Aug 07, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INEFFECTIVE CORRECTIVE ACTIONS FOR FAILURE TO FOLLOW TECHNICAL SPECIFICATIONS CONCERNING COMMON CAUSE FAILURE TESTING OF EMERGENCY DIESEL GENERATORS

The inspectors identified that the licensee failed to take effective corrective action to preclude repetition of the failure to comply with Technical Specification limiting condition for operation requirements directing testing of redundant standby emergency diesel generator power supplies within 24 hours. A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified. The finding was of very low safety significance because, in both cases of Technical Specification non-compliance, the redundant standby emergency diesel generators were tested satisfactorily, indicating that no actual loss of safety function occurred.

Inspection Report# : [2001011\(pdf\)](#)**Significance:** Jun 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AFW SYSTEM INCORRECTLY RETURNED TO MAINTENANCE RULE (a)(2) STATUS WITHOUT MEETING THE REQUIREMENTS IN THE LICENSEE'S (a)(1) ACTION PLAN

A Non-Cited Violation [of 10 CFR 50.65] was identified for the licensee erroneously returning the auxiliary feedwater system to (a)(2) status prior to meeting licensee established (a)(1) performance goals in December 2000. The licensee's inaccurate monitoring of system unavailability against established (a)(1) unavailability goals was determined to be the cause of the error. Since no actual loss of the safety function of the auxiliary feedwater system occurred, this issue was evaluated as having very low safety significance.

Inspection Report# : [2001010\(pdf\)](#)



Significance: Jun 30, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

USE OF THE STEAM GENERATOR BLOWDOWN ISOLATION INTERLOCK DEFEAT SWITCH COULD RESULT IN LOSS OF SAFETY FUNCTION

Code of Federal Regulations 10 CFR Part 50, Appendix B, Criterion III, "Design Control," requires, in part, that measures be established to assure that the design basis specified in the licensee application be correctly translated into procedures and instructions. Contrary to this requirements, the licensee modified steam generator blowdown isolation circuitry to allow defeating the blowdown isolation function during surveillance testing without considering the design basis requirements of the auxiliary feedwater system to provide the heat removal equivalent feedwater flow, 200 gpm, to each unit necessary for post-accident decay heat removal. This issue has been included in the licensee's corrective action program as CR 01-0108.

Inspection Report# : [2001010\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO PROVIDE DIRECT READINGS OF STEAM GENERATOR 'B' PRESSURE PARAMETER WHICH WAS NECESSARY TO PERFORM SAFE SHUTDOWN FUNCTIONS

10 CFR Part 50, Appendix R, Section III.L.2.d, requires the process monitoring function be capable of providing direct readings of the process variables necessary to perform and control safe shutdown functions. Contrary to the above, the licensee failed to provide direct readings of steam generator 'B' pressure parameter which was necessary to perform safe shutdown functions.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO INSTALL THE FIRE STOPS IN A CONFIGURATION WHICH WOULD PREVENT PROPAGATION OF FIRE FROM ONE REDUNDANT TRAIN TO ANOTHER

10 CFR Part 50, Appendix R, Section III.G.2.b, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards. An exemption to this requirement was granted by the NRC, dated July 3, 1985, which stated that the approved alternative was to install fire stops in the intervening cable trays. Contrary to the above, the licensee failed to install the fire stops in the Unit 1 motor control center room in a configuration which would prevent propagation of fire from one redundant train of charging pump cables to another.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REDUNDANT INSTRUMENT CABLES WERE LOCATED WITHIN 20 FEET OF EACH OTHER IN THE UNITS 1 AND 2 CONTAINMENTS

10 CFR Part 50, Appendix R, Section III.G.2.d, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards inside non-inerted containment. Contrary to the above, redundant cables for several temperature elements and steam generator level instruments were located within 20 feet of each other in the Units 1 and 2 containments.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSTULATED FIRE COULD LEAD TO LOSS OF REDUNDANT TRAINS OF CHARGING PUMPS

10 CFR Part 50, Appendix R, Section III.L.2.b, requires the reactor coolant makeup function be capable of maintaining the reactor coolant level within the level indication in the pressurizer for pressurized water reactors. Contrary to the above, in eight fire zones, the cables associated with volume control tank and reactor water storage tank outlet valves were routed in the same fire areas. There would be insufficient time to take manual actions to prevent failure of charging pumps credited for maintaining reactor coolant level.

Inspection Report# : [2001008\(pdf\)](#)



Significance: May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REPLACEMENT OF CHARGING PUMP CONTROL POWER FUSE OUTSIDE APPENDIX R DESIGN BASIS

10 CFR Part 50, Appendix R, Section III.G.1, requires that fire protection features be provided for systems important to safe shutdown so that one train of systems necessary to achieve and maintain hot shutdown conditions is free of fire damage. Contrary to the above, the licensee failed to provide redundant fusing to protect the control cable associated with the credited charging pump which was necessary for hot shutdown condition and was not free of fire damage.

Inspection Report# : [2001008\(pdf\)](#)

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

TECHNICAL SPECIFICATION REQUIREMENTS FOR TESTING RPS ACTUATION SYSTEM LOGIC NOT SATISFIED

Technical Specification Table 15.4.1-1, "Minimum Frequencies for Checks, Calibrations, and Test of Instrument Channels," Item 44, "Reactor Protection System and Emergency Safety Feature Actuation System Logic," required monthly testing of Reactor Protection System trips which includes the power range low power trip and the intermediate range high flux trip logics. Contrary to this requirement, a surveillance test requirement was missed when the licensee failed to test the power range low power and the intermediate range high flux trips within 24 hours after reducing power below 10 percent after having operated in excess of 10 percent power for greater than the monthly surveillance test frequency. This issue was entered in the licensee's corrective action program as CR 01-0118.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO COMPLY WITH LIMITING CONDITION FOR OPERATION ACTION STATEMENT TO START REDUNDNT STANDBY

Technical Specification 15.3.7.B.1.g required redundant standby emergency power supplies to be started within 24 hours before or after the normal power supply or emergency power supply to Unit 1 A06/B04 or Unit 2 A05/B03 safeguards busses being taken out-of-service. Contrary to this requirement, the licensee identified that the standby emergency power supply to the Unit 2 A05/B03 was out-of- service for 37 hours without the redundant standby emergency power supply being started. This issue was entered in the licensee's corrective action program as CR 00-3475.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Feb 12, 2001

Identified By: NRC

Item Type: FIN Finding

16 VALVES ON UNIT 2 SI SYSTEM WERE LOCKED CLOSED INSTEAD OF JUST CLOSED.

The inspectors identified that 16 valves in the Unit 2 safety injection system were locked closed instead of just closed as required by plant procedure. The failure to maintain valve position in accordance with applicable plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process.

However, the inspectors determined that the extent of the status control errors, the repetitive nature of locked valve problems, and the failure of previously identified corrective actions constituted extenuating circumstances in accordance with Manual Chapter 0609.

Inspection Report# : [2001003\(pdf\)](#)



Significance: Feb 12, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE CONTROL OF CABLE SPREADING ROOM HIGH ENERGY LINE BREAK BARRIER.

The licensee's quality assurance organization identified that a 4½-inch pipe built into and penetrating a wall of the cable spreading room, used for temporary running of cables into the room, was being controlled as a fire barrier impairment but not as a high-energy line break barrier impairment. The pipe had not been included in the licensee's procedure on high energy line break barriers. The failure to include the 4½" pipe in Administrative Procedure NP 8.4.16, "PBNP [Point Beach Nuclear Plant] High Energy Line Break Barriers," was considered a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements.

Inspection Report# : [2001003\(pdf\)](#)

**Significance:** Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR BYPASSING ALARMS FOR HEAT TRACE CIRCUITS FOR SAFETY-RELATED EQUIPMENT.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that specified actions that inappropriately de-energized heat trace circuits for safety-related equipment when the intent was only to bypass alarms. The finding was of very low safety significance because safety-related equipment was not actually rendered inoperable.

Inspection Report# : [2000017\(pdf\)](#)**Significance:** Nov 09, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR PRESSURE TEST OF RESIDUAL HEAT REMOVAL VALVE.

On October 11, 2000, the inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that did not require verification of appropriate automatic overpressure protection on hydrostatic pressure test equipment during valve seat leakage testing on Train "B" of the Unit 2 residual heat removal system. This finding was of very low safety significance because procedurally required manual overpressure protection was available during testing and Train "A" of the Unit 2 residual heat removal system was operable.

Inspection Report# : [2000014\(pdf\)](#)**Significance:** N/A Aug 22, 2000

Identified By: NRC

Item Type: FIN Finding

SAFETY INJECTION VALVES NOT LOCKED AS REQUIRED BY PLANT PROCEDURE.

The inspectors identified that 24 valves in the Unit 2 safety injection system were not locked as required by plant procedure. The failure to lock the valves in accordance with plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors and repetitive nature of the locked valve problems constituted extenuating circumstances in accordance with Manual Chapter 0609. This finding was assigned to Unit 2.

Inspection Report# : [2000009\(pdf\)](#)**Significance:** N/A May 05, 2000

Identified By: NRC

Item Type: FIN Finding

INADEQUATE OPERABILITY DETERMINATIONS.

The inspectors identified that operability determinations lacked sufficient engineering basis to support continuing operability calls. The licensee was able to show current system operability, given the plant conditions at the time of the inspection.

Inspection Report# : [2000006\(pdf\)](#)**Significance:** May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN CALCULATIONS FOR SERVICE WATER TESTING ACCEPTANCE CRITERIA.

The inspectors identified errors in the calculations providing the uncertainty values for determining the service water inservice testing acceptance criteria. The errors resulted in the lower inservice testing acceptance criteria being below the required design minimum flow. The risk significance of this was low because, at the time of the inspection, all six pumps had flow rates above the minimum acceptance criteria. This issue was considered the first example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)**Significance:** May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN SERVICE WATER TEMPERATURE UNCERTAINTY VALUES.

The inspectors identified errors in the service water temperature uncertainty values. This resulted in the control room temperature indications being non-conservatively low. The risk significance of this was low because, at the time of the inspection, lake temperatures were below the design basis maximum. This was the second example of a Non-Cited Violation of 10 CFR Part 50,

Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)



Significance: May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERROR IN CALCULATION PUMP NET POSITIVE SUCTION HEAD.

The inspectors identified a fundamental error in calculating pump net positive suction head which basically concluded that the pumps would have adequate suction even if the intake was completely uncovered. The risk significance of this was low because, at the time of the inspection, forebay level was sufficiently high to ensure the pumps were operable. This was the third example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Barrier Integrity



Significance: Nov 09, 2000

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR SHIELDING PLACEMENT IN FRONT OF CONTROL ROOM WINDOWS.

An operating procedure did not provide for timely placement of portable shielding in front of control room windows to ensure accident doses to operator would remain below NRC limits. This was contrary to Criterion V, "Instructions, Procedures, and Drawings," of Appendix B of 10 CFR Part 50, requires that activities affecting quality be prescribed by documented instructions, procedures, or drawings.

Inspection Report# : [2000014\(pdf\)](#)

Emergency Preparedness

Significance: TBD Apr 01, 2002

Identified By: NRC

Item Type: URI Unresolved item

Inadequate Critique of Two Exercise Performance Issues

Two exercise performance issues, which are associated with emergency preparedness planning standard 10 CFR 50.47(b)(10), were inadequately critiqued by licensee staff. The first issue was associated with the licensee's critique of the initial offsite Protective Action Recommendation (PAR) that its exercise participants communicated to offsite officials. The NRC identified issues that contradicted the licensee's critique conclusion that the initial PAR was a successful performance indicator opportunity with respect to its content. The second issue was the licensee's critique of its participants decision making process on the simulated removal from the site of non-essential personnel, who were not members of the current shift of emergency responders, once all onsite personnel were accounted for. Using the Emergency Preparedness Significance Determination Process, the NRC has made a preliminary determination that the finding was of low to moderate risk significance (White). In accordance with NRC's Enforcement Policy, as published in NUREG 1600, it was determined that there is no apparent violation of NRC requirements since the critique issues were related to an exercise, rather than to an actual emergency.

Inspection Report# : [2002004\(pdf\)](#)

Significance: N/A Nov 03, 2000

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION OF WHITE PERFORMANCE INDICATOR.

The licensee's initial evaluations and corrective actions associated with the White alert and notification system (ANS) performance indicator (PI) were not adequate. Following the initial NRC onsite inspection and a parallel review by the licensee's quality assurance staff, the licensee performed a comprehensive root cause evaluation of ANS performance. The inspector determined that this evaluation was thorough and effectively identified the root causes of the siren system performance issues. In addition, the licensee fully determined the technical issue that resulted in siren test failures. As a root cause, the licensee concluded that the siren upgrade project was performed outside of the licensee's normal procurement process, which would have provided additional quality assurance, software testing and verification, and project oversight. In addition, the staff did not consistently use the licensee's corrective action system to document system failures. The licensee attributed these failures to a "mindset" among the emergency preparedness staff that resulted in the staff using internal processes instead of normal plant processes. In terms of corrective

actions, the inspector found that the licensee's final planned corrective actions appeared to address the root causes identified in its evaluation. However, the licensee had not yet defined what measures would be implemented to ensure that the effectiveness of these corrective measures were reviewed, nor had the licensee completed its extent of condition review.

Inspection Report# : [2000012\(pdf\)](#)

Occupational Radiation Safety



Significance: Mar 31, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

WORKER ENTERED A HIGH RADIATION AREA WITHOUT GETTING RADIATION PROTECTION DEPARTMENT APPROVAL OR BRIEF

Technical Specification Section 15.6.11., Radiation Protection Program, required that an individual entering a high radiation area be under the control of a radiation work permit that includes specification of the radiation dose rates in the immediate work area and other appropriate radiation protection equipment and measures. Contrary to this requirement, during resin transfer operations on February 27, 2001, a laundry decontamination worker entered a high radiation area without getting radiation protection department approval or a brief as required by Radiation Work Permit (RWP) 01-005, Revision 0. This issue was entered in the licensee's corrective action program as CR 01-0611.

Inspection Report# : [2001007\(pdf\)](#)

Public Radiation Safety

Physical Protection

Miscellaneous

Significance: N/A Mar 30, 2001

Identified By: NRC

Item Type: FIN Finding

EFFECTIVE CORRECTIVE ACTION PROGRAM.

The team concluded that the licensee was generally effective at identifying problems and putting them into the corrective action program. There was strong management emphasis on plant staff to identify problems and, overall, a very responsive plant staff. Since 1997, there had been an average of 4200 condition reports written each year. With the large number of condition reports and associated corrective actions, a dated software platform for the corrective action program, and the press of routine and emergent work activities, there was indication of timeliness and quality problems with some aspects of the corrective action program.

Examples were identified by the inspectors, consistent with what the licensee had identified, of protracted resolution of problems with the freeze protection system and with discrepancies between the locked status of valves in the plant and the designation as locked in equipment checklists. Examples were also identified where corrective actions for some problems had been incorporated with the resolution of other related problems which were then incorporated with the resolution of yet other problems (that is, by closing corrective action documents to other documents and so on), creating the potential for dilution of the effectiveness of corrective actions for some of the original problems and for unintended extension of due dates for older items. Although there had been some expressed dissatisfaction with some aspects of the corrective action program, the inspectors identified no impediments to a safety conscious work environment.

Inspection Report# : [2001006\(pdf\)](#)

Significance: N/A Dec 31, 2000

Identified By: NRC

Item Type: FIN Finding

CROSS-CUTTING ISSUE FOR PROCEDURE INADEQUACIES.

The inspectors determined that a negative performance trend had developed in several cornerstone areas with procedure inadequacy being the common element based on two examples identified during this reporting period and two previously identified examples of inadequate procedures. All four examples related to the licensee development, technical review, and approval of

procedures. While the risk of the individual examples was very low, the licensee had failed to ensure that procedures were correct prior to being approved for use. These findings collectively indicated a problem with the licensee's human performance in the area of procedure development, technical review, and approval.

Inspection Report# : [2000017\(pdf\)](#)

Significance: N/A Sep 30, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE EMERGENCY OPERATING PROCEDURE FOR TERMINATING CONTAINMENT SPRAY.

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified during the review of Licensee Event Report 50-266/2000-005-00, "Termination Criteria for Containment Spray in Emergency Operating Procedure Non-Conservative with Safety Analysis Assumptions." This report described a discrepancy with an Emergency Operating Procedure which had the potential to allow operators to prematurely secure containment spray prior to reaching the analyzed draw down level of the refueling water storage tank. The corrective actions were being tracked in the licensee's corrective action program.

Inspection Report# : [2000013\(pdf\)](#)

Significance: N/A May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

NUMEROUS ERRORS IDENTIFIED IN CALCULATIONS.

The inspectors identified errors in the majority of calculations reviewed. These errors, along with those discussed above, indicated that a human performance issue might exist, relating to the depth and adequacy of engineering reviews. The errors constitute a fourth example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Last modified : July 22, 2002

Point Beach 2

Initiating Events

Significance: N/A Nov 02, 2001

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION FOR WHITE PERFORMANCE INDICATOR

This supplemental inspection was performed to assess the licensee's evaluation of the Unplanned Scrams per 7,000 Critical Hours Performance Indicator (PI) for Unit 2 which transitioned from Green to White in the second quarter of 2001. The evaluation was determined to be acceptable. The licensee utilized a structured approach to evaluate the circumstances of the individual plant trips and the collective significance of the four trips to identify potential common causes. The inspector determined that corrective actions for each of the plant trips contributing to the White PI corresponded with the root and contributing causes identified by the root cause evaluations. The corrective actions were either completed or being tracked for completion. In two of the four trips, the corrective action and root cause program established a process for performing assessment reviews to assess the effectiveness of corrective actions. Due to the licensee's acceptable performance in addressing the root and contributing causes of the individual plant trips which contributed to exceeding the licensee response threshold for Unplanned Scrams, the White PI associated with this issue will only be considered in assessing plant performance for a total of four quarters, in accordance with the guidance in IMC 0305, "Operating Reactor Assessment Program."

Inspection Report# : [2001016\(pdf\)](#)



Significance: G Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

UNPLANNED REACTOR VESSEL LEVEL DECREASE DURING COUPLING OF REACTOR COOLANT PUMP.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure which resulted in an inadvertent decrease in reactor coolant system inventory during reactor coolant pump coupling while in cold shutdown. The finding was of very low safety significance because residual heat removal was not impacted and the amount of water that could have been drained from the reactor coolant system was limited by system configuration and alignment.

Inspection Report# : [2000017\(pdf\)](#)

Mitigating Systems



Significance: W Feb 25, 2002

Identified By: NRC

Item Type: VIO Violation

2P-15B Safety Injection Pump Failure During Monthly Preventative Maintenance Lubrication Activity

White. Unit 2. On February 20, 2002, the 2P-15B safety injection pump failed, during monthly preventative maintenance bearing lubrication activities, due to gas binding caused by back-leakage of nitrogen-saturated water from

a reactor coolant system safety injection accumulator. Despite multiple opportunities to have identified the effects of the leaking accumulator, the licensee's organization did not properly respond to adverse accumulator leakage trends or effectively use industry operating experience to prevent failure of the safety injection pump. As documented in the final significance determination letter dated June 13, 2002, the NRC determined that the failure to take prompt corrective actions to preclude repetition after Point Beach personnel concluded that the safety injection system was susceptible to gas binding and when decreasing trends in the Unit 2 A safety injection accumulator level were identified is a violation of Criterion XVI, "Correction Action," of 10 CFR Part 50, Appendix B.

Inspection Report# : [2002003\(pdf\)](#)

Inspection Report# : [2002005\(pdf\)](#)



Significance: Dec 13, 2001

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002.

Inspection Report# : [2001017\(pdf\)](#)



Significance: Nov 06, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO TAKE TIMELY CORRECTIVE ACTION REGARDING INADEQUATE CONTROL OF MAINTENANCE ACTIVITIES DURING COLD WEATHER CONDITIONS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action"), in that the licensee failed to take corrective action prior to the onset of freezing temperatures in the fall of 2001 for previously identified problems with the plant's freeze protection system. The finding was considered to be more than minor because the freeze protection system helps to protect safety-related components from freezing and the system's failure could have a credible impact on safety. Because there was no actual failure of safety-related components associated with the mitigating systems cornerstone, the finding is considered to be of very low significance

Inspection Report# : [2001014\(pdf\)](#)



Significance: Sep 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

NO PROCEDURES TO PREVENT EXCESSIVE FOULING OF SERVICE WATER STRAINERS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion V), in that, the licensee failed to provide adequate written instruction to prevent excessive fouling of the service water header strainers. As a result, a condition adverse to quality was self-revealed on September 20, 2001, when auxiliary operators identified, while taking logs, that both the north and south header strainers were excessively fouled. The excessive fouling resulted in the service water system being in a configuration that was beyond design basis analyses. The Non-Cited Violation was considered of low risk significance since, for the plant and environmental conditions at the time of discovery, no actual loss of safety function occurred or would have occurred.

Inspection Report# : [2001013\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: FIN Finding

HUMAN PERFORMANCE CROSS-CUTTING ISSUE DUE TO WEAKNESSES IN FIRE PROTECTION ENGINEERING AREA

The inspectors identified a number of issues which, collectively, indicated that human performance weaknesses existed in the fire protection engineering area.

Inspection Report# : [2001012\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT EMERGENCY LIGHTING TO SUPPORT SAFE SHUTDOWN

The inspectors identified that there was insufficient emergency lighting to support performance of required safe shutdown actions. Specifically, there was insufficient emergency lighting in the Unit 1 and Unit 2 façade areas to support performing confirmatory actions to fail air to the Unit 1 and Unit 2 main steam isolation valves so as to ensure these valves would not spuriously reopen. The failure to have adequate emergency lighting is a violation of 10 CFR Part 50, Appendix R, Section III.J. The finding was greater than minor because a delay in performing safe shutdown actions could occur due to the lack of emergency lighting. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)



Significance: G Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AUXILIARY FEEDWATER PUMP ROOM HALON SYSTEM INADEQUATE

The inspectors identified that the automatic fire suppression system for the auxiliary feedwater pump room was not adequate. The installed fire suppression system was only designed for surface fires and was not designed to provide the necessary soak time for deep-seated fires. However, deep-seated fire hazards had been introduced to the room. The failure to have an adequate automatic suppression system is a violation of 10 CFR Part 50, Appendix R, Section III.G.2. The finding was determined to be greater than minor because the finding involved automatic suppression, a fire protection defense-in-depth element. The finding was determined to be of very low safety significance (Green) because the inspectors were not able to postulate a fire scenario which could sustain a deep-seated fire and damage redundant trains of equipment. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT APPENDIX R FUEL OIL SUPPLY

The inspectors identified that the licensee had failed to maintain a 72-hour fuel supply on-site for generator G-05 relied upon for safe shutdown in the event of a fire. The failure to maintain a 72-hour supply of fuel is a violation of 10 CFR Part 50, Appendix R, Section III.L.3. The finding was greater than minor because the capability to achieve and maintain cold shutdown conditions for 72 hours was not provided. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)

Significance:  Sep 28, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSSIBLE SPURIOUS OPENING OF POWER-OPERATED RELIEF VALVE DURING FIRES

10 CFR Part 50, Appendix R, Section III.G.1.a required, in part, that one train of systems necessary to achieve and maintain hot shutdown conditions be free of fire damage. As discussed in LER 50-266/1999-006-00; 50-301/1999-006-00, hot shutdown conditions would not have been able to be maintained during the ensuing plant transient which would have resulted from a stuck open pressurizer PORV (power-operated relief valve).

Inspection Report# : [2001012\(pdf\)](#)

Significance:  Aug 07, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INEFFECTIVE CORRECTIVE ACTIONS FOR FAILURE TO FOLLOW TECHNICAL SPECIFICATIONS CONCERNING COMMON CAUSE FAILURE TESTING OF EMERGENCY DIESEL GENERATORS

The inspectors identified that the licensee failed to take effective corrective action to preclude repetition of the failure to comply with Technical Specification limiting condition for operation requirements directing testing of redundant standby emergency diesel generator power supplies within 24 hours. A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified. The finding was of very low safety significance because, in both cases of Technical Specification non-compliance, the redundant standby emergency diesel generators were tested satisfactorily, indicating that no actual loss of safety function occurred.

Inspection Report# : [2001011\(pdf\)](#)

Significance:  Jun 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AFW SYSTEM INCORRECTLY RETURNED TO MAINTENANCE RULE (a)(2) STATUS WITHOUT MEETING THE REQUIREMENTS IN THE LICENSEE'S (a)(1) ACTION PLAN

A Non-Cited Violation [of 10 CFR 50.65] was identified for the licensee erroneously returning the auxiliary feedwater system to (a)(2) status prior to meeting licensee established (a)(1) performance goals in December 2000. The licensee's inaccurate monitoring of system unavailability against established (a)(1) unavailability goals was determined to be the cause of the error. Since no actual loss of the safety function of the auxiliary feedwater system occurred, this issue was evaluated as having very low safety significance.

Inspection Report# : [2001010\(pdf\)](#)

Significance:  Jun 30, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

USE OF THE STEAM GENERATOR BLOWDOWN ISOLATION INTERLOCK DEFEAT SWITCH COULD RESULT IN LOSS OF SAFETY FUNCTION

Code of Federal Regulations 10 CFR Part 50, Appendix B, Criterion III, "Design Control," requires, in part, that measures be established to assure that the design basis specified in the licensee application be correctly translated into procedures and instructions. Contrary to this requirements, the licensee modified steam generator blowdown isolation circuitry to allow defeating the blowdown isolation function during surveillance testing without considering the design basis requirements of the auxiliary feedwater system to provide the heat removal equivalent feedwater flow, 200 gpm, to each unit necessary for post-accident decay heat removal. This issue has been included in the licensee's corrective action program as CR 01-0108.

Inspection Report# : [2001010\(pdf\)](#)

Significance:  May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO PROVIDE DIRECT READINGS OF STEAM GENERATOR 'B' PRESSURE PARAMETER WHICH WAS NECESSARY TO PERFORM SAFE SHUTDOWN FUNCTIONS

10 CFR Part 50, Appendix R, Section III.L.2.d, requires the process monitoring function be capable of providing direct readings of the process variables necessary to perform and control safe shutdown functions. Contrary to the above, the licensee failed to provide direct readings of steam generator 'B' pressure parameter which was necessary to perform safe shutdown functions.

Inspection Report# : [2001008\(pdf\)](#)

Significance:  May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO INSTALL THE FIRE STOPS IN A CONFIGURATION WHICH WOULD PREVENT PROPAGATION OF FIRE FROM ONE REDUNDANT TRAIN TO ANOTHER

10 CFR Part 50, Appendix R, Section III.G.2.b, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards. An exemption to this requirement was granted by the NRC, dated July 3, 1985, which stated that the approved alternative was to install fire stops in the intervening cable trays. Contrary to the above, the licensee failed to install the fire stops in the Unit 1 motor control center room in a configuration which would prevent propagation of fire from one redundant train of charging pump cables to another.

Inspection Report# : [2001008\(pdf\)](#)

Significance:  May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REDUNDANT INSTRUMENT CABLES WERE LOCATED WITHIN 20 FEET OF EACH OTHER IN THE UNITS 1 AND 2 CONTAINMENTS

10 CFR Part 50, Appendix R, Section III.G.2.d, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire

hazards inside non-inerted containment. Contrary to the above, redundant cables for several temperature elements and steam generator level instruments were located within 20 feet of each other in the Units 1 and 2 containments.

Inspection Report# : [2001008\(pdf\)](#)

Significance:  May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSTULATED FIRE COULD LEAD TO LOSS OF REDUNDANT TRAINS OF CHARGING PUMPS

10 CFR Part 50, Appendix R, Section III.L.2.b, requires the reactor coolant makeup function be capable of maintaining the reactor coolant level within the level indication in the pressurizer for pressurized water reactors. Contrary to the above, in eight fire zones, the cables associated with volume control tank and reactor water storage tank outlet valves were routed in the same fire areas. There would be insufficient time to take manual actions to prevent failure of charging pumps credited for maintaining reactor coolant level.

Inspection Report# : [2001008\(pdf\)](#)

Significance:  May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REPLACEMENT OF CHARGING PUMP CONTROL POWER FUSE OUTSIDE APPENDIX R DESIGN BASIS

10 CFR Part 50, Appendix R, Section III.G.1, requires that fire protection features be provided for systems important to safe shutdown so that one train of systems necessary to achieve and maintain hot shutdown conditions is free of fire damage. Contrary to the above, the licensee failed to provide redundant fusing to protect the control cable associated with the credited charging pump which was necessary for hot shutdown condition and was not free of fire damage.

Inspection Report# : [2001008\(pdf\)](#)

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

TECHNICAL SPECIFICATION REQUIREMENTS FOR TESTING RPS ACTUATION SYSTEM LOGIC NOT SATISFIED

Technical Specification Table 15.4.1-1, "Minimum Frequencies for Checks, Calibrations, and Test of Instrument Channels," Item 44, "Reactor Protection System and Emergency Safety Feature Actuation System Logic," required monthly testing of Reactor Protection System trips which includes the power range low power trip and the intermediate range high flux trip logics. Contrary to this requirement, a surveillance test requirement was missed when the licensee failed to test the power range low power and the intermediate range high flux trips within 24 hours after reducing power below 10 percent after having operated in excess of 10 percent power for greater than the monthly surveillance test frequency. This issue was entered in the licensee's corrective action program as CR 01-0118.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO COMPLY WITH LIMITING CONDITION FOR OPERATION ACTION STATEMENT TO START REDUNDANT STANDBY

Technical Specification 15.3.7.B.1.g required redundant standby emergency power supplies to be started within 24 hours before or after the normal power supply or emergency power supply to Unit 1 A06/B04 or Unit 2 A05/B03 safeguards busses being taken out-of-service. Contrary to this requirement, the licensee identified that the standby

emergency power supply to the Unit 2 A05/B03 was out-of- service for 37 hours without the redundant standby emergency power supply being started. This issue was entered in the licensee's corrective action program as CR 00-3475.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Feb 12, 2001

Identified By: NRC

Item Type: FIN Finding

16 VALVES ON UNIT 2 SI SYSTEM WERE LOCKED CLOSED INSTEAD OF JUST CLOSED.

The inspectors identified that 16 valves in the Unit 2 safety injection system were locked closed instead of just closed as required by plant procedure. The failure to maintain valve position in accordance with applicable plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors, the repetitive nature of locked valve problems, and the failure of previously identified corrective actions constituted extenuating circumstances in accordance with Manual Chapter 0609.

Inspection Report# : [2001003\(pdf\)](#)

Significance:  Feb 12, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE CONTROL OF CABLE SPREADING ROOM HIGH ENERGY LINE BREAK BARRIER.

The licensee's quality assurance organization identified that a 4½-inch pipe built into and penetrating a wall of the cable spreading room, used for temporary running of cables into the room, was being controlled as a fire barrier impairment but not as a high-energy line break barrier impairment. The pipe had not been included in the licensee's procedure on high energy line break barriers. The failure to include the 4½" pipe in Administrative Procedure NP 8.4.16, "PBNP [Point Beach Nuclear Plant] High Energy Line Break Barriers," was considered a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements.

Inspection Report# : [2001003\(pdf\)](#)

Significance:  Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR BYPASSING ALARMS FOR HEAT TRACE CIRCUITS FOR SAFETY-RELATED EQUIPMENT.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that specified actions that inappropriately de-energized heat trace circuits for safety-related equipment when the intent was only to bypass alarms. The finding was of very low safety significance because safety-related equipment was not actually rendered inoperable.

Inspection Report# : [2000017\(pdf\)](#)

Significance:  Nov 09, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR PRESSURE TEST OF RESIDUAL HEAT REMOVAL VALVE.

On October 11, 2000, the inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that did not require verification of appropriate

automatic overpressure protection on hydrostatic pressure test equipment during valve seat leakage testing on Train "B" of the Unit 2 residual heat removal system. This finding was of very low safety significance because procedurally required manual overpressure protection was available during testing and Train "A" of the Unit 2 residual heat removal system was operable.

Inspection Report# : [2000014\(pdf\)](#)

Significance: N/A Aug 22, 2000

Identified By: NRC

Item Type: FIN Finding

SAFETY INJECTION VALVES NOT LOCKED AS REQUIRED BY PLANT PROCEDURE.

The inspectors identified that 24 valves in the Unit 2 safety injection system were not locked as required by plant procedure. The failure to lock the valves in accordance with plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors and repetitive nature of the locked valve problems constituted extenuating circumstances in accordance with Manual Chapter 0609. This finding was assigned to Unit 2.

Inspection Report# : [2000009\(pdf\)](#)

Significance: N/A May 05, 2000

Identified By: NRC

Item Type: FIN Finding

INADEQUATE OPERABILITY DETERMINATIONS.

The inspectors identified that operability determinations lacked sufficient engineering basis to support continuing operability calls. The licensee was able to show current system operability, given the plant conditions at the time of the inspection.

Inspection Report# : [2000006\(pdf\)](#)

Significance:  May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN CALCULATIONS FOR SERVICE WATER TESTING ACCEPTANCE CRITERIA.

The inspectors identified errors in the calculations providing the uncertainty values for determining the service water inservice testing acceptance criteria. The errors resulted in the lower inservice testing acceptance criteria being below the required design minimum flow. The risk significance of this was low because, at the time of the inspection, all six pumps had flow rates above the minimum acceptance criteria. This issue was considered the first example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Significance:  May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN SERVICE WATER TEMPERATURE UNCERTAINTY VALUES.

The inspectors identified errors in the service water temperature uncertainty values. This resulted in the control room temperature indications being non-conservatively low. The risk significance of this was low because, at the time of the inspection, lake temperatures were below the design basis maximum. This was the second example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Significance:  May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERROR IN CALCULATION PUMP NET POSITIVE SUCTION HEAD.

The inspectors identified a fundamental error in calculating pump net positive suction head which basically concluded that the pumps would have adequate suction even if the intake was completely uncovered. The risk significance of this was low because, at the time of the inspection, forebay level was sufficiently high to ensure the pumps were operable. This was the third example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control." Inspection Report# : [2000006\(pdf\)](#)

Barrier Integrity

Significance:  Nov 09, 2000

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR SHIELDING PLACEMENT IN FRONT OF CONTROL ROOM WINDOWS.

An operating procedure did not provide for timely placement of portable shielding in front of control room windows to ensure accident doses to operator would remain below NRC limits. This was contrary to Criterion V, "Instructions, Procedures, and Drawings," of Appendix B of 10 CFR Part 50, requires that activities affecting quality be prescribed by documented instructions, procedures, or drawings.

Inspection Report# : [2000014\(pdf\)](#)

Emergency Preparedness

Significance: TBD Apr 01, 2002

Identified By: NRC

Item Type: URI Unresolved item

Inadequate Critique of Two Exercise Performance Issues

Two exercise performance issues, which are associated with emergency preparedness planning standard 10 CFR 50.47 (b)(10), were inadequately critiqued by licensee staff. The first issue was associated with the licensee's critique of the initial offsite Protective Action Recommendation (PAR) that its exercise participants communicated to offsite officials. The NRC identified issues that contradicted the licensee's critique conclusion that the initial PAR was a successful performance indicator opportunity with respect to its content. The second issue was the licensee's critique of its participants decision making process on the simulated removal from the site of non-essential personnel, who were not members of the current shift of emergency responders, once all onsite personnel were accounted for. Using the Emergency Preparedness Significance Determination Process, the NRC has made a preliminary determination that the finding was of low to moderate risk significance (White). In accordance with NRC's Enforcement Policy, as published in NUREG 1600, it was determined that there is no apparent violation of NRC requirements since the critique issues were related to an exercise, rather than to an actual emergency.

Inspection Report# : [2002004\(pdf\)](#)

Significance: N/A Nov 03, 2000

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION OF WHITE PERFORMANCE INDICATOR.

The licensee's initial evaluations and corrective actions associated with the White alert and notification system (ANS) performance indicator (PI) were not adequate. Following the initial NRC onsite inspection and a parallel review by the licensee's quality assurance staff, the licensee performed a comprehensive root cause evaluation of ANS performance. The inspector determined that this evaluation was thorough and effectively identified the root causes of the siren system performance issues. In addition, the licensee fully determined the technical issue that resulted in siren test failures. As a root cause, the licensee concluded that the siren upgrade project was performed outside of the licensee's normal procurement process, which would have provided additional quality assurance, software testing and verification, and project oversight. In addition, the staff did not consistently use the licensee's corrective action system to document system failures. The licensee attributed these failures to a "mindset" among the emergency preparedness staff that resulted in the staff using internal processes instead of normal plant processes. In terms of corrective actions, the inspector found that the licensee's final planned corrective actions appeared to address the root causes identified in its evaluation. However, the licensee had not yet defined what measures would be implemented to ensure that the effectiveness of these corrective measures were reviewed, nor had the licensee completed its extent of condition review.

Inspection Report# : [2000012\(pdf\)](#)

Occupational Radiation Safety



Significance: Mar 31, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

WORKER ENTERED A HIGH RADIATION AREA WITHOUT GETTING RADIATION PROTECTION DEPARTMENT APPROVAL OR BRIEF

Technical Specification Section 15.6.11., Radiation Protection Program, required that an individual entering a high radiation area be under the control of a radiation work permit that includes specification of the radiation dose rates in the immediate work area and other appropriate radiation protection equipment and measures. Contrary to this requirement, during resin transfer operations on February 27, 2001, a laundry decontamination worker entered a high radiation area without getting radiation protection department approval or a brief as required by Radiation Work Permit (RWP) 01-005, Revision 0. This issue was entered in the licensee's corrective action program as CR 01-0611.

Inspection Report# : [2001007\(pdf\)](#)

Public Radiation Safety

Physical Protection

Miscellaneous

Significance: N/A Mar 30, 2001

Identified By: NRC

Item Type: FIN Finding

EFFECTIVE CORRECTIVE ACTION PROGRAM.

The team concluded that the licensee was generally effective at identifying problems and putting them into the corrective action program. There was strong management emphasis on plant staff to identify problems and, overall, a very responsive plant staff. Since 1997, there had been an average of 4200 condition reports written each year. With the large number of condition reports and associated corrective actions, a dated software platform for the corrective action program, and the press of routine and emergent work activities, there was indication of timeliness and quality problems with some aspects of the corrective action program. Examples were identified by the inspectors, consistent with what the licensee had identified, of protracted resolution of problems with the freeze protection system and with discrepancies between the locked status of valves in the plant and the designation as locked in equipment checklists. Examples were also identified where corrective actions for some problems had been incorporated with the resolution of other related problems which were then incorporated with the resolution of yet other problems (that is, by closing corrective action documents to other documents and so on), creating the potential for dilution of the effectiveness of corrective actions for some of the original problems and for unintended extension of due dates for older items. Although there had been some expressed dissatisfaction with some aspects of the corrective action program, the inspectors identified no impediments to a safety conscious work environment.

Inspection Report# : [2001006\(pdf\)](#)

Significance: N/A Dec 31, 2000

Identified By: NRC

Item Type: FIN Finding

CROSS-CUTTING ISSUE FOR PROCEDURE INADEQUACIES.

The inspectors determined that a negative performance trend had developed in several cornerstone areas with procedure inadequacy being the common element based on two examples identified during this reporting period and two previously identified examples of inadequate procedures. All four examples related to the licensee development, technical review, and approval of procedures. While the risk of the individual examples was very low, the licensee had failed to ensure that procedures were correct prior to being approved for use. These findings collectively indicated a problem with the licensee's human performance in the area of procedure development, technical review, and approval.

Inspection Report# : [2000017\(pdf\)](#)

Significance: N/A Sep 30, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE EMERGENCY OPERATING PROCEDURE FOR TERMINATING CONTAINMENT SPRAY.

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified during the review of Licensee Event Report 50-266/2000-005-00, "Termination Criteria for Containment Spray in Emergency Operating Procedure Non-Conservative with Safety Analysis Assumptions." This report described a discrepancy with an Emergency Operating Procedure which had the potential to allow operators to prematurely secure containment spray prior to reaching the analyzed draw down level of the refueling water storage tank. The corrective actions were being tracked in the licensee's corrective action program.

Inspection Report# : [2000013\(pdf\)](#)

Significance: N/A May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

NUMEROUS ERRORS IDENTIFIED IN CALCULATIONS.

The inspectors identified errors in the majority of calculations reviewed. These errors, along with those discussed above, indicated that a human performance issue might exist, relating to the depth and adequacy of engineering

reviews. The errors constitute a fourth example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Last modified : August 29, 2002

Point Beach 2

Initiating Events

Significance: N/A Nov 02, 2001

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION FOR WHITE PERFORMANCE INDICATOR

This supplemental inspection was performed to assess the licensee's evaluation of the Unplanned Scrams per 7,000 Critical Hours Performance Indicator (PI) for Unit 2 which transitioned from Green to White in the second quarter of 2001. The evaluation was determined to be acceptable. The licensee utilized a structured approach to evaluate the circumstances of the individual plant trips and the collective significance of the four trips to identify potential common causes. The inspector determined that corrective actions for each of the plant trips contributing to the White PI corresponded with the root and contributing causes identified by the root cause evaluations. The corrective actions were either completed or being tracked for completion. In two of the four trips, the corrective action and root cause program established a process for performing assessment reviews to assess the effectiveness of corrective actions. Due to the licensee's acceptable performance in addressing the root and contributing causes of the individual plant trips which contributed to exceeding the licensee response threshold for Unplanned Scrams, the White PI associated with this issue will only be considered in assessing plant performance for a total of four quarters, in accordance with the guidance in IMC 0305, "Operating Reactor Assessment Program."

Inspection Report# : [2001016\(pdf\)](#)



Significance: G Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

UNPLANNED REACTOR VESSEL LEVEL DECREASE DURING COUPLING OF REACTOR COOLANT PUMP.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure which resulted in an inadvertent decrease in reactor coolant system inventory during reactor coolant pump coupling while in cold shutdown. The finding was of very low safety significance because residual heat removal was not impacted and the amount of water that could have been drained from the reactor coolant system was limited by system configuration and alignment.

Inspection Report# : [2000017\(pdf\)](#)

Mitigating Systems



Significance: G Sep 30, 2002

Identified By: NRC

Item Type: FIN Finding

Conduct of a Partial G02 EDG Safety Injection Test Based on an Inadequate Assessment

Unit 2. The inspectors identified a finding of very low safety significance (Green) concerning the conduct of a partial G02 emergency diesel generator safety injection test while in Mode 1 based on an incomplete and inadequate assessment required by Technical Specification surveillance requirement 3.8.1.5. The finding was determined not to involve a violation of regulatory requirements due to the simplicity of the test and the quality of the pre-job briefing, which effectively met the Technical Specification requirements. The finding was determined to be of very low risk significance since the inadequate assessment did not result in a design or qualification deficiency, an actual loss of the safety function, or involve internal or external initiating events.

Inspection Report# : [2002010\(pdf\)](#)

Significance:  Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Untimely Development and Approval of (a) (1) Action Plan for Gas Turbine, G05

Units 1 and 2. The inspectors identified a Non-Cited Violation of 10 CFR 50.65(a)(1) concerning the failure to set (a) (1) goals and monitor against the established goals for the G05 gas turbine (GT), a risk significant maintenance rule component relied upon to meet station blackout and certain Appendix R requirements. The issue of failing to set G05 GT (a)(1) goals and monitor against the established goals was more than minor since actual G05 GT equipment problems occurred. However, since the G05 equipment problems were not attributable to a 10 CFR 50.65(a)(1) violation, rather, a maintenance rule violation occurred as a consequence of the G05 GT problems, the performance deficiency could not be processed through the Manual Chapter 0609, "Significance Determination Process." Therefore, in accordance with Appendix B to Inspection Manual Chapter 0612, this maintenance rule violation was considered to be of very low safety significance.

Inspection Report# : [2002010\(pdf\)](#)

Significance:  Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Use of Steam Generator Narrow Range Level Detector During Cold Shutdown Plant Conditions

Unit 2. The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements for an inadequate shutdown emergency procedure which failed to account for the impact of varying water density differences on the steam generator narrow range level detector variable leg when transitioning from hot to cold plant conditions. Specifically, safety-related shutdown emergency procedures contained operator instructions that could have caused the top of the steam generator U-tubes to become uncovered, thereby affecting the ability of the steam generators to function as a heat sink for removing reactor decay heat. The finding was of very low risk significance since NRC senior risk analysts determined that the discrepancy associated with the steam generator narrow range level indication would not have appreciably impacted steam generator heat removal capabilities.

Inspection Report# : [2002010\(pdf\)](#)

Significance:  Feb 25, 2002

Identified By: NRC

Item Type: VIO Violation

2P-15B Safety Injection Pump Failure During Monthly Preventative Maintenance Lubrication Activity

White. Unit 2. On February 20, 2002, the 2P-15B safety injection pump failed, during monthly preventative maintenance bearing lubrication activities, due to gas binding caused by back-leakage of nitrogen-saturated water from a reactor coolant system safety injection accumulator. Despite multiple opportunities to have identified the effects of the leaking accumulator, the licensee's organization did not properly respond to adverse accumulator leakage trends or effectively use industry operating experience to prevent failure of the safety injection pump. As documented in the final significance determination letter dated June 13, 2002, the NRC determined that the failure to take prompt corrective actions to preclude repetition after Point Beach personnel concluded that the safety injection system was susceptible to gas binding and when decreasing trends in the Unit 2 A safety injection accumulator level were identified is a violation of Criterion XVI, "Correction Action," of 10 CFR Part 50, Appendix B.

Inspection Report# : [2002003\(pdf\)](#)

Inspection Report# : [2002005\(pdf\)](#)

Inspection Report# : [2002012\(pdf\)](#)

Significance:  Dec 13, 2001

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002.

Inspection Report# : [2001017\(pdf\)](#)

Significance:  Nov 06, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO TAKE TIMELY CORRECTIVE ACTION REGARDING INADEQUATE CONTROL OF MAINTENANCE ACTIVITIES DURING COLD WEATHER CONDITIONS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action"), in that the licensee failed to take corrective action prior to the onset of freezing temperatures in the fall of 2001 for previously identified problems with the plant's freeze protection system. The finding was considered to be more than minor because the freeze protection system helps to protect safety-related components from freezing and the system's failure could have a credible impact on safety. Because there was no actual failure of safety-related components associated with the mitigating systems cornerstone, the finding is considered to be of very low significance

Inspection Report# : [2001014\(pdf\)](#)

Significance:  Sep 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

NO PROCEDURES TO PREVENT EXCESSIVE FOULING OF SERVICE WATER STRAINERS

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion V), in that, the licensee failed to provide adequate written instruction to prevent excessive fouling of the service water header strainers. As a result, a condition adverse to quality was self-revealed on September 20, 2001, when auxiliary operators identified, while taking logs, that both the north and south header strainers were excessively fouled. The excessive fouling resulted in the service water system being in a configuration that was beyond design basis analyses. The Non-Cited Violation was considered of low risk significance since, for the plant and environmental conditions at the time of discovery, no actual loss of safety function occurred or would have occurred.

Inspection Report# : [2001013\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: FIN Finding

HUMAN PERFORMANCE CROSS-CUTTING ISSUE DUE TO WEAKNESSES IN FIRE PROTECTION

ENGINEERING AREA

The inspectors identified a number of issues which, collectively, indicated that human performance weaknesses existed in the fire protection engineering area.

Inspection Report# : [2001012\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT EMERGENCY LIGHTING TO SUPPORT SAFE SHUTDOWN

The inspectors identified that there was insufficient emergency lighting to support performance of required safe shutdown actions. Specifically, there was insufficient emergency lighting in the Unit 1 and Unit 2 façade areas to support performing confirmatory actions to fail air to the Unit 1 and Unit 2 main steam isolation valves so as to ensure these valves would not spuriously reopen. The failure to have adequate emergency lighting is a violation of 10 CFR Part 50, Appendix R, Section III.J. The finding was greater than minor because a delay in performing safe shutdown actions could occur due to the lack of emergency lighting. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)

Significance:  Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AUXILIARY FEEDWATER PUMP ROOM HALON SYSTEM INADEQUATE

The inspectors identified that the automatic fire suppression system for the auxiliary feedwater pump room was not adequate. The installed fire suppression system was only designed for surface fires and was not designed to provide the necessary soak time for deep-seated fires. However, deep-seated fire hazards had been introduced to the room. The failure to have an adequate automatic suppression system is a violation of 10 CFR Part 50, Appendix R, Section III.G.2. The finding was determined to be greater than minor because the finding involved automatic suppression, a fire protection defense-in-depth element. The finding was determined to be of very low safety significance (Green) because the inspectors were not able to postulate a fire scenario which could sustain a deep-seated fire and damage redundant trains of equipment. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)

Significance: N/A Sep 28, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INSUFFICIENT APPENDIX R FUEL OIL SUPPLY

The inspectors identified that the licensee had failed to maintain a 72-hour fuel supply on-site for generator G-05 relied upon for safe shutdown in the event of a fire. The failure to maintain a 72-hour supply of fuel is a violation of 10 CFR Part 50, Appendix R, Section III.L.3. The finding was greater than minor because the capability to achieve and maintain cold shutdown conditions for 72 hours was not provided. The finding was determined to be No Color because the finding did not involve the impairment or degradation of a fire protection defense-in-depth element. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2001012\(pdf\)](#)

Significance:  Sep 28, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSSIBLE SPURIOUS OPENING OF POWER-OPERATED RELIEF VALVE DURING FIRES

10 CFR Part 50, Appendix R, Section III.G.1.a required, in part, that one train of systems necessary to achieve and maintain hot shutdown conditions be free of fire damage. As discussed in LER 50-266/1999-006-00; 50-301/1999-006-00, hot shutdown conditions would not have been able to be maintained during the ensuing plant transient which would have resulted from a stuck open pressurizer PORV (power-operated relief valve).

Inspection Report# : [2001012\(pdf\)](#)

Significance:  Aug 07, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

INEFFECTIVE CORRECTIVE ACTIONS FOR FAILURE TO FOLLOW TECHNICAL SPECIFICATIONS CONCERNING COMMON CAUSE FAILURE TESTING OF EMERGENCY DIESEL GENERATORS

The inspectors identified that the licensee failed to take effective corrective action to preclude repetition of the failure to comply with Technical Specification limiting condition for operation requirements directing testing of redundant standby emergency diesel generator power supplies within 24 hours. A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified. The finding was of very low safety significance because, in both cases of Technical Specification non-compliance, the redundant standby emergency diesel generators were tested satisfactorily, indicating that no actual loss of safety function occurred.

Inspection Report# : [2001011\(pdf\)](#)

Significance:  Jun 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

AFW SYSTEM INCORRECTLY RETURNED TO MAINTENANCE RULE (a)(2) STATUS WITHOUT MEETING THE REQUIREMENTS IN THE LICENSEE'S (a)(1) ACTION PLAN

A Non-Cited Violation [of 10 CFR 50.65] was identified for the licensee erroneously returning the auxiliary feedwater system to (a)(2) status prior to meeting licensee established (a)(1) performance goals in December 2000. The licensee's inaccurate monitoring of system unavailability against established (a)(1) unavailability goals was determined to be the cause of the error. Since no actual loss of the safety function of the auxiliary feedwater system occurred, this issue was evaluated as having very low safety significance.

Inspection Report# : [2001010\(pdf\)](#)

Significance:  Jun 30, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

USE OF THE STEAM GENERATOR BLOWDOWN ISOLATION INTERLOCK DEFEAT SWITCH COULD RESULT IN LOSS OF SAFETY FUNCTION

Code of Federal Regulations 10 CFR Part 50, Appendix B, Criterion III, "Design Control," requires, in part, that measures be established to assure that the design basis specified in the licensee application be correctly translated into procedures and instructions. Contrary to this requirements, the licensee modified steam generator blowdown isolation circuitry to allow defeating the blowdown isolation function during surveillance testing without considering the design basis requirements of the auxiliary feedwater system to provide the heat removal equivalent feedwater flow, 200 gpm, to each unit necessary for post-accident decay heat removal. This issue has been included in the licensee's corrective action program as CR 01-0108.

Inspection Report# : [2001010\(pdf\)](#)

Significance:  May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO PROVIDE DIRECT READINGS OF STEAM GENERATOR 'B' PRESSURE PARAMETER WHICH WAS NECESSARY TO PERFORM SAFE SHUTDOWN FUNCTIONS

10 CFR Part 50, Appendix R, Section III.L.2.d, requires the process monitoring function be capable of providing direct readings of the process variables necessary to perform and control safe shutdown functions. Contrary to the above, the licensee failed to provide direct readings of steam generator 'B' pressure parameter which was necessary to perform safe shutdown functions.

Inspection Report# : [2001008\(pdf\)](#)

Significance:  May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

FAILURE TO INSTALL THE FIRE STOPS IN A CONFIGURATION WHICH WOULD PREVENT PROPAGATION OF FIRE FROM ONE REDUNDANT TRAIN TO ANOTHER

10 CFR Part 50, Appendix R, Section III.G.2.b, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards. An exemption to this requirement was granted by the NRC, dated July 3, 1985, which stated that the approved alternative was to install fire stops in the intervening cable trays. Contrary to the above, the licensee failed to install the fire stops in the Unit 1 motor control center room in a configuration which would prevent propagation of fire from one redundant train of charging pump cables to another.

Inspection Report# : [2001008\(pdf\)](#)

Significance:  May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REDUNDANT INSTRUMENT CABLES WERE LOCATED WITHIN 20 FEET OF EACH OTHER IN THE UNITS 1 AND 2 CONTAINMENTS

10 CFR Part 50, Appendix R, Section III.G.2.d, requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards inside non-inerted containment. Contrary to the above, redundant cables for several temperature elements and steam generator level instruments were located within 20 feet of each other in the Units 1 and 2 containments.

Inspection Report# : [2001008\(pdf\)](#)

Significance:  May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

POSTULATED FIRE COULD LEAD TO LOSS OF REDUNDANT TRAINS OF CHARGING PUMPS

10 CFR Part 50, Appendix R, Section III.L.2.b, requires the reactor coolant makeup function be capable of maintaining the reactor coolant level within the level indication in the pressurizer for pressurized water reactors. Contrary to the above, in eight fire zones, the cables associated with volume control tank and reactor water storage tank outlet valves were routed in the same fire areas. There would be insufficient time to take manual actions to prevent failure of charging pumps credited for maintaining reactor coolant level.

Inspection Report# : [2001008\(pdf\)](#)

Significance:  May 08, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

REPLACEMENT OF CHARGING PUMP CONTROL POWER FUSE OUTSIDE APPENDIX R DESIGN BASIS

10 CFR Part 50, Appendix R, Section III.G.1, requires that fire protection features be provided for systems important to

safe shutdown so that one train of systems necessary to achieve and maintain hot shutdown conditions is free of fire damage. Contrary to the above, the licensee failed to provide redundant fusing to protect the control cable associated with the credited charging pump which was necessary for hot shutdown condition and was not free of fire damage.

Inspection Report# : [2001008\(pdf\)](#)

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

TECHNICAL SPECIFICATION REQUIREMENTS FOR TESTING RPS ACTUATION SYSTEM LOGIC NOT SATISFIED

Technical Specification Table 15.4.1-1, "Minimum Frequencies for Checks, Calibrations, and Test of Instrument Channels," Item 44, "Reactor Protection System and Emergency Safety Feature Actuation System Logic," required monthly testing of Reactor Protection System trips which includes the power range low power trip and the intermediate range high flux trip logics. Contrary to this requirement, a surveillance test requirement was missed when the licensee failed to test the power range low power and the intermediate range high flux trips within 24 hours after reducing power below 10 percent after having operated in excess of 10 percent power for greater than the monthly surveillance test frequency. This issue was entered in the licensee's corrective action program as CR 01-0118.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Mar 31, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO COMPLY WITH LIMITING CONDITION FOR OPERATION ACTION STATEMENT TO START REDUNDANT STANDBY

Technical Specification 15.3.7.B.1.g required redundant standby emergency power supplies to be started within 24 hours before or after the normal power supply or emergency power supply to Unit 1 A06/B04 or Unit 2 A05/B03 safeguards busses being taken out-of-service. Contrary to this requirement, the licensee identified that the standby emergency power supply to the Unit 2 A05/B03 was out-of-service for 37 hours without the redundant standby emergency power supply being started. This issue was entered in the licensee's corrective action program as CR 00-3475.

Inspection Report# : [2001007\(pdf\)](#)

Significance: N/A Feb 12, 2001

Identified By: NRC

Item Type: FIN Finding

16 VALVES ON UNIT 2 SI SYSTEM WERE LOCKED CLOSED INSTEAD OF JUST CLOSED.

The inspectors identified that 16 valves in the Unit 2 safety injection system were locked closed instead of just closed as required by plant procedure. The failure to maintain valve position in accordance with applicable plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors, the repetitive nature of locked valve problems, and the failure of previously identified corrective actions constituted extenuating circumstances in accordance with Manual Chapter 0609.

Inspection Report# : [2001003\(pdf\)](#)

Significance:  Feb 12, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE CONTROL OF CABLE SPREADING ROOM HIGH ENERGY LINE BREAK BARRIER.

The licensee's quality assurance organization identified that a 4½-inch pipe built into and penetrating a wall of the cable spreading room, used for temporary running of cables into the room, was being controlled as a fire barrier impairment but not as a high-energy line break barrier impairment. The pipe had not been included in the licensee's procedure on high energy line break barriers. The failure to include the 4½" pipe in Administrative Procedure NP 8.4.16, "PBNP [Point Beach Nuclear Plant] High Energy Line Break Barriers," was considered a violation of 10 CFR Part 50,

Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements.

Inspection Report# : [2001003\(pdf\)](#)

Significance:  Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR BYPASSING ALARMS FOR HEAT TRACE CIRCUITS FOR SAFETY-RELATED EQUIPMENT.

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that specified actions that inappropriately de-energized heat trace circuits for safety-related equipment when the intent was only to bypass alarms. The finding was of very low safety significance because safety-related equipment was not actually rendered inoperable.

Inspection Report# : [2000017\(pdf\)](#)

Significance:  Nov 09, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR PRESSURE TEST OF RESIDUAL HEAT REMOVAL VALVE.

On October 11, 2000, the inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an inadequate procedure that did not require verification of appropriate automatic overpressure protection on hydrostatic pressure test equipment during valve seat leakage testing on Train "B" of the Unit 2 residual heat removal system. This finding was of very low safety significance because procedurally required manual overpressure protection was available during testing and Train "A" of the Unit 2 residual heat removal system was operable.

Inspection Report# : [2000014\(pdf\)](#)

Significance: N/A Aug 22, 2000

Identified By: NRC

Item Type: FIN Finding

SAFETY INJECTION VALVES NOT LOCKED AS REQUIRED BY PLANT PROCEDURE.

The inspectors identified that 24 valves in the Unit 2 safety injection system were not locked as required by plant procedure. The failure to lock the valves in accordance with plant procedure did not affect the operability, availability, or reliability of the safety injection system and was not evaluated using the Significance Determination Process. However, the inspectors determined that the extent of the status control errors and repetitive nature of the locked valve problems constituted extenuating circumstances in accordance with Manual Chapter 0609. This finding was assigned to Unit 2.

Inspection Report# : [2000009\(pdf\)](#)

Significance: N/A May 05, 2000

Identified By: NRC

Item Type: FIN Finding

INADEQUATE OPERABILITY DETERMINATIONS.

The inspectors identified that operability determinations lacked sufficient engineering basis to support continuing operability calls. The licensee was able to show current system operability, given the plant conditions at the time of the inspection.

Inspection Report# : [2000006\(pdf\)](#)

Significance:  May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN CALCULATIONS FOR SERVICE WATER TESTING ACCEPTANCE CRITERIA.

The inspectors identified errors in the calculations providing the uncertainty values for determining the service water inservice testing acceptance criteria. The errors resulted in the lower inservice testing acceptance criteria being below the required design minimum flow. The risk significance of this was low because, at the time of the inspection, all six pumps had flow rates above the minimum acceptance criteria. This issue was considered the first example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Significance:  May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERRORS IN SERVICE WATER TEMPERATURE UNCERTAINTY VALUES.

The inspectors identified errors in the service water temperature uncertainty values. This resulted in the control room temperature indications being non-conservatively low. The risk significance of this was low because, at the time of the inspection, lake temperatures were below the design basis maximum. This was the second example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Significance:  May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

ERROR IN CALCULATION PUMP NET POSITIVE SUCTION HEAD.

The inspectors identified a fundamental error in calculating pump net positive suction head which basically concluded that the pumps would have adequate suction even if the intake was completely uncovered. The risk significance of this was low because, at the time of the inspection, forebay level was sufficiently high to ensure the pumps were operable. This was the third example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Barrier Integrity

Significance:  Nov 09, 2000

Identified By: Licensee

Item Type: NCV NonCited Violation

INADEQUATE PROCEDURE FOR SHIELDING PLACEMENT IN FRONT OF CONTROL ROOM WINDOWS.

An operating procedure did not provide for timely placement of portable shielding in front of control room windows to ensure accident doses to operator would remain below NRC limits. This was contrary to Criterion V, "Instructions, Procedures, and Drawings," of Appendix B of 10 CFR Part 50, requires that activities affecting quality be prescribed by documented instructions, procedures, or drawings.

Inspection Report# : [2000014\(pdf\)](#)

Emergency Preparedness

Significance:  Apr 01, 2002

Identified By: NRC

Item Type: FIN Finding

Inadequate Critique of Two Exercise Performance Issues

Two exercise performance issues, which are associated with emergency preparedness planning standard 10 CFR 50.47 (b)(10), were inadequately critiqued by licensee staff. The first issue was associated with the licensee's critique of the initial offsite Protective Action Recommendation (PAR) that its exercise participants communicated to offsite officials. The NRC identified issues that contradicted the licensee's critique conclusion that the initial PAR was a successful performance indicator opportunity with respect to its content. The second issue was the licensee's critique of its participants decision making process on the simulated removal from the site of non-essential personnel, who were not members of the current shift of emergency responders, once all onsite personnel were accounted for. Using the Emergency Preparedness Significance Determination Process, the NRC has made a preliminary determination that the finding was of low to moderate risk significance (White). In accordance with NRC's Enforcement Policy, as published in NUREG 1600, it was determined that there is no apparent violation of NRC requirements since the critique issues were related to an exercise, rather than to an actual emergency. On September 12, 2002, the NRC provided the licensee with a letter detailing the final results of the NRC's significance determination of the February 2002 Exercise critique finding. Based on the information obtained during the inspection, including the feedback obtained from the licensee during the April 2002 exit interview, and the additional information contained in the licensee's June 27, 2002 submittal, the NRC concluded that the inspection finding is appropriately characterized as a White finding.

Inspection Report# : [2002004\(pdf\)](#)

Significance: N/A Nov 03, 2000

Identified By: NRC

Item Type: FIN Finding

SUPPLEMENTAL INSPECTION OF WHITE PERFORMANCE INDICATOR.

The licensee's initial evaluations and corrective actions associated with the White alert and notification system (ANS) performance indicator (PI) were not adequate. Following the initial NRC onsite inspection and a parallel review by the licensee's quality assurance staff, the licensee performed a comprehensive root cause evaluation of ANS performance. The inspector determined that this evaluation was thorough and effectively identified the root causes of the siren system performance issues. In addition, the licensee fully determined the technical issue that resulted in siren test failures. As a root cause, the licensee concluded that the siren upgrade project was performed outside of the licensee's normal procurement process, which would have provided additional quality assurance, software testing and verification, and project oversight. In addition, the staff did not consistently use the licensee's corrective action system to document system failures. The licensee attributed these failures to a "mindset" among the emergency preparedness staff that resulted in the staff using internal processes instead of normal plant processes. In terms of corrective actions, the inspector found that the licensee's final planned corrective actions appeared to address the root causes identified in its evaluation. However, the licensee had not yet defined what measures would be implemented to ensure that the effectiveness of these corrective measures were reviewed, nor had the licensee completed its extent of condition review.

Inspection Report# : [2000012\(pdf\)](#)

Occupational Radiation Safety

Significance:  Mar 31, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

WORKER ENTERED A HIGH RADIATION AREA WITHOUT GETTING RADIATION PROTECTION DEPARTMENT APPROVAL OR BRIEF

Technical Specification Section 15.6.11., Radiation Protection Program, required that an individual entering a high radiation area be under the control of a radiation work permit that includes specification of the radiation dose rates in the immediate work area and other appropriate radiation protection equipment and measures. Contrary to this requirement, during resin transfer operations on February 27, 2001, a laundry decontamination worker entered a high radiation area without getting radiation protection department approval or a brief as required by Radiation Work Permit

(RWP) 01-005, Revision 0. This issue was entered in the licensee's corrective action program as CR 01-0611.

Inspection Report# : [2001007\(pdf\)](#)

Public Radiation Safety

Physical Protection

Miscellaneous

Significance: N/A Mar 30, 2001

Identified By: NRC

Item Type: FIN Finding

EFFECTIVE CORRECTIVE ACTION PROGRAM.

The team concluded that the licensee was generally effective at identifying problems and putting them into the corrective action program. There was strong management emphasis on plant staff to identify problems and, overall, a very responsive plant staff. Since 1997, there had been an average of 4200 condition reports written each year. With the large number of condition reports and associated corrective actions, a dated software platform for the corrective action program, and the press of routine and emergent work activities, there was indication of timeliness and quality problems with some aspects of the corrective action program. Examples were identified by the inspectors, consistent with what the licensee had identified, of protracted resolution of problems with the freeze protection system and with discrepancies between the locked status of valves in the plant and the designation as locked in equipment checklists. Examples were also identified where corrective actions for some problems had been incorporated with the resolution of other related problems which were then incorporated with the resolution of yet other problems (that is, by closing corrective action documents to other documents and so on), creating the potential for dilution of the effectiveness of corrective actions for some of the original problems and for unintended extension of due dates for older items. Although there had been some expressed dissatisfaction with some aspects of the corrective action program, the inspectors identified no impediments to a safety conscious work environment.

Inspection Report# : [2001006\(pdf\)](#)

Significance: N/A Dec 31, 2000

Identified By: NRC

Item Type: FIN Finding

CROSS-CUTTING ISSUE FOR PROCEDURE INADEQUACIES.

The inspectors determined that a negative performance trend had developed in several cornerstone areas with procedure inadequacy being the common element based on two examples identified during this reporting period and two previously identified examples of inadequate procedures. All four examples related to the licensee development, technical review, and approval of procedures. While the risk of the individual examples was very low, the licensee had failed to ensure that procedures were correct prior to being approved for use. These findings collectively indicated a problem with the licensee's human performance in the area of procedure development, technical review, and approval.

Inspection Report# : [2000017\(pdf\)](#)

Significance: N/A Sep 30, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE EMERGENCY OPERATING PROCEDURE FOR TERMINATING CONTAINMENT SPRAY.

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was

identified during the review of Licensee Event Report 50-266/2000-005-00, "Termination Criteria for Containment Spray in Emergency Operating Procedure Non-Conservative with Safety Analysis Assumptions." This report described a discrepancy with an Emergency Operating Procedure which had the potential to allow operators to prematurely secure containment spray prior to reaching the analyzed draw down level of the refueling water storage tank. The corrective actions were being tracked in the licensee's corrective action program.

Inspection Report# : [2000013\(pdf\)](#)

Significance: N/A May 05, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

NUMEROUS ERRORS IDENTIFIED IN CALCULATIONS.

The inspectors identified errors in the majority of calculations reviewed. These errors, along with those discussed above, indicated that a human performance issue might exist, relating to the depth and adequacy of engineering reviews. The errors constitute a fourth example of a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2000006\(pdf\)](#)

Last modified : December 02, 2002

Point Beach 2

Initiating Events



Significance: Dec 28, 2002

Identified By: NRC

Item Type: FIN Finding

Inadequate and Untimely Corrective Actions For Flooding of Manholes Containing Cables

One finding of very low risk significance was identified by the inspectors for the licensee's failure to establish timely and adequate corrective actions to address the flooding of manholes which contained both safety and non-safety related systems, structures, and components. The inspectors identified that the licensee had not implemented effective corrective actions to address long-standing problems with flooding in manholes and had deferred the implementation of corrective actions with insufficient basis. The finding was more than minor because, if left uncorrected, it would become a more significant concern since the lack of effective corrective actions to inspect and pump out water in manholes could affect safety-related cables routed through manholes such as those for service water pumps. Additionally, some of the cables routed in manholes provide power to safety-related buses from the licensee's offsite power systems. Hence, the loss of such power, due to cable failures, could result in momentary loss of power to the bus and the inability to re-energize the affected buses from the normal power source. This issue was categorized as a finding of very low risk significance since the identified water intrusion conditions had not caused any safety-related equipment failures at this time. No violation of NRC requirements occurred.

Inspection Report# : [2002013\(pdf\)](#)



Significance: Dec 28, 2002

Identified By: NRC

Item Type: FIN Finding

Insufficient Preparation for Cold Weather Conditions

A finding of very low significance was identified for not sufficiently coordinating and being adequately prepared for the onset of cold weather prior to November 1, 2002, a point at which the Point Beach Nuclear Plant had experienced 30 hours of below freezing temperatures over 6 nights. The primary cause of this finding was related to the cross-cutting area of human performance. Despite beginning freeze protection activities at an appropriate time, lack of coordination between licensee departments resulted in incomplete preparations prior to the onset of freezing temperatures. The inspectors determined that the issue was more than minor because it increased the likelihood of those events that upset plant stability during power operations and would, if left uncorrected, become a more significant safety concern in subsequent years if more safety-related systems were to be affected. The finding was of very low safety significance because no safety-related functions or mitigating systems were rendered inoperable. No violation of NRC requirements occurred.

Inspection Report# : [2002013\(pdf\)](#)

Mitigating Systems



Significance: Sep 30, 2002

Identified By: NRC

Item Type: FIN Finding

Conduct of a Partial G02 EDG Safety Injection Test Based on an Inadequate Assessment

The inspectors identified a finding of very low safety significance (Green) concerning the conduct of a partial G02 emergency diesel generator safety injection test while in Mode 1 based on an incomplete and inadequate assessment required by Technical Specification surveillance requirement 3.8.1.5. The finding was determined not to involve a violation of regulatory requirements due to the simplicity of the test and the quality of the pre-job briefing, which effectively met the Technical Specification requirements. The finding was determined to be of very low risk significance since the inadequate assessment did not result in a design or qualification deficiency, an actual loss of the safety function, or involve internal or external initiating events.

Inspection Report# : [2002010\(pdf\)](#)



Significance: Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Untimely Development and Approval of (a) (1) Action Plan for Gas Turbine, G05

The inspectors identified a Non-Cited Violation of 10 CFR 50.65(a)(1) concerning the failure to set (a)(1) goals and monitor against the established goals for the G05 gas turbine (GT), a risk significant maintenance rule component relied upon to meet station blackout and certain Appendix R requirements. The issue of failing to set G05 GT (a)(1) goals and monitor against the established goals was more than minor since actual G05 GT equipment problems occurred. However, since the G05 equipment problems were not attributable to a 10 CFR 50.65(a)(1) violation, rather, a maintenance rule violation occurred as a consequence of the G05 GT problems, the performance deficiency could not be processed through the Manual Chapter 0609, "Significance Determination Process." Therefore, in accordance with Appendix B to Inspection Manual Chapter 0612, this maintenance rule violation was considered to be of very low safety significance.

Inspection Report# : [2002010\(pdf\)](#)



Significance: Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Use of Steam Generator Narrow Range Level Detector During Cold Shutdown Plant Conditions

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements for an inadequate shutdown emergency procedure which failed to account for the impact of varying water density differences on the steam generator narrow range level detector variable leg when transitioning from hot to cold plant conditions. Specifically, safety-related shutdown emergency procedures contained operator instructions that could have caused the top of the steam generator U-tubes to become uncovered, thereby affecting the ability of the steam generators to function as a heat sink for removing reactor decay heat. The finding was of very low risk significance since NRC senior risk analysts determined that the discrepancy associated with the steam generator narrow range level indication would not have appreciably impacted steam generator heat removal capabilities.

Inspection Report# : [2002010\(pdf\)](#)



Significance: Aug 09, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Emergency Operating Procedures Incorrectly Translated From Design Basis of the Safety Injection System

The inspectors identified a Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." Several specific emergency operating procedure (EOP) deficiencies were identified during the inspection. The finding was considered to be greater than minor because the failure of licensee personnel to take appropriate actions under post-accident conditions could have resulted in system operating modes that had not been analyzed, and could have affected the performance of safety-related components and had a credible impact on safety. Because there was no actual failure of safety-related components associated with the mitigating systems cornerstone, the finding is considered to be of very low safety significance

Inspection Report# : [2002009\(pdf\)](#)



Significance: Aug 09, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective Actions Were Inadequate to Ensure Accurate Calculations For RWST Water Level

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action") where the licensee failed to take adequate corrective actions to resolve previously identified problems with the plant's engineering calculations concerning refueling water storage tank (RWST) water levels. The finding was considered to be greater than minor because licensee personnel failed to correct repetitive RWST calculation errors, which resulted in the propagation of erroneous RWST elevation vs. level data into inputs to other calculations. Inaccurate level indications were provided to the control room operators during performance of emergency operating procedures (EOPs). The failure to provide the operator with accurate RWST level indications during the performance of EOPs during a potential loss of coolant accident could have adversely affected the performance of safety-related components and had a credible impact on safety. Because there was no actual failure of safety-related components associated with the mitigating systems cornerstone, the finding is considered to be of very low safety significance

Inspection Report# : [2002009\(pdf\)](#)



Significance: Feb 25, 2002

Identified By: NRC

Item Type: VIO Violation

2P-15B Safety Injection Pump Failure During Monthly Preventative Maintenance Lubrication Activity

White. Unit 2. On February 20, 2002, the 2P-15B safety injection pump failed, during monthly preventative maintenance bearing lubrication activities, due to gas binding caused by back-leakage of nitrogen-saturated water from a reactor coolant system safety injection accumulator. Despite multiple opportunities to have identified the effects of the leaking accumulator, the licensee's organization did not properly respond to adverse accumulator leakage trends or effectively use industry operating experience to prevent failure of the safety injection pump. As

documented in the final significance determination letter dated June 13, 2002, the NRC determined that the failure to take prompt corrective actions to preclude repetition after Point Beach personnel concluded that the safety injection system was susceptible to gas binding and when decreasing trends in the Unit 2 A safety injection accumulator level were identified is a violation of Criterion XVI, "Correction Action," of 10 CFR Part 50, Appendix B.

Inspection Report# : [2002003\(pdf\)](#)

Inspection Report# : [2002005\(pdf\)](#)

Inspection Report# : [2002012\(pdf\)](#)



Significance: Dec 13, 2001

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002.

Inspection Report# : [2001017\(pdf\)](#)

Barrier Integrity



Significance: Dec 28, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Pressurizer Safety Valve Failed to Lift at Test Pressure

The inspectors identified a Non-Cited Violation of Technical Specification 3.4.10 for the operation of Unit 2 from December 2000 to April 2002 with one inoperable pressurizer safety valve. The primary cause of this finding was related to the cross-cutting area of human performance, in that, inattention to the job-at-hand resulted in a vendor reassembling the valve such that it would not have lifted at the required setpoint. The inspectors determined that the issue was more than minor because it affected the functionality of the reactor coolant system pressure boundary, a physical barrier designed to protect the public from radionuclide releases caused by accidents or events. However, the finding was of very low risk significance since the change in core damage frequency as a result of having operated with the inoperable safety valve was determined to be less than 1E-6/year.

Inspection Report# : [2002013\(pdf\)](#)

Emergency Preparedness



Significance: Apr 01, 2002

Identified By: NRC

Item Type: FIN Finding

Inadequate Critique of Two Exercise Performance Issues

Two exercise performance issues, which are associated with emergency preparedness planning standard 10 CFR 50.47(b)(10), were inadequately critiqued by licensee staff. The first issue was associated with the licensee's critique of the initial offsite Protective Action Recommendation (PAR) that its exercise participants communicated to offsite officials. The NRC identified issues that contradicted the licensee's critique conclusion that the initial PAR was a successful performance indicator opportunity with respect to its content. The second issue was the licensee's critique of its participants decision making process on the simulated removal from the site of non-essential personnel, who were not members of the current shift of emergency responders, once all onsite personnel were accounted for. Using the Emergency Preparedness Significance Determination Process, the NRC has made a preliminary determination that the finding was of low to moderate risk

significance (White). In accordance with NRC's Enforcement Policy, as published in NUREG 1600, it was determined that there is no apparent violation of NRC requirements since the critique issues were related to an exercise, rather than to an actual emergency. On September 12, 2002, the NRC provided the licensee with a letter detailing the final results of the NRC's significance determination of the February 2002 Exercise critique finding. Based on the information obtained during the inspection, including the feedback obtained from the licensee during the April 2002 exit interview, and the additional information contained in the licensee's June 27, 2002 submittal, the NRC concluded that the inspection finding is appropriately characterized as a White finding.

Inspection Report# : [2002004\(pdf\)](#)

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Miscellaneous

Last modified : March 25, 2003

Point Beach 2

1Q/2003 Plant Inspection Findings

Initiating Events

Significance:  Dec 28, 2002

Identified By: NRC

Item Type: FIN Finding

Inadequate and Untimely Corrective Actions For Flooding of Manholes Containing Cables

One finding of very low risk significance was identified by the inspectors for the licensee's failure to establish timely and adequate corrective actions to address the flooding of manholes which contained both safety and non-safety related systems, structures, and components. The inspectors identified that the licensee had not implemented effective corrective actions to address long-standing problems with flooding in manholes and had deferred the implementation of corrective actions with insufficient basis. The finding was more than minor because, if left uncorrected, it would become a more significant concern since the lack of effective corrective actions to inspect and pump out water in manholes could affect safety-related cables routed through manholes such as those for service water pumps.

Additionally, some of the cables routed in manholes provide power to safety-related buses from the licensee's offsite power systems. Hence, the loss of such power, due to cable failures, could result in momentary loss of power to the bus and the inability to re-energize the affected buses from the normal power source. This issue was categorized as a finding of very low risk significance since the identified water intrusion conditions had not caused any safety-related equipment failures at this time. No violation of NRC requirements occurred.

Inspection Report# : [2002013\(pdf\)](#)

Significance:  Dec 28, 2002

Identified By: NRC

Item Type: FIN Finding

Insufficient Preparation for Cold Weather Conditions

A finding of very low significance was identified for not sufficiently coordinating and being adequately prepared for the onset of cold weather prior to November 1, 2002, a point at which the Point Beach Nuclear Plant had experienced 30 hours of below freezing temperatures over 6 nights. The primary cause of this finding was related to the cross-cutting area of human performance. Despite beginning freeze protection activities at an appropriate time, lack of coordination between licensee departments resulted in incomplete preparations prior to the onset of freezing temperatures. The inspectors determined that the issue was more than minor because it increased the likelihood of those events that upset plant stability during power operations and would, if left uncorrected, become a more significant safety concern in subsequent years if more safety-related systems were to be affected. The finding was of very low safety significance because no safety-related functions or mitigating systems were rendered inoperable. No violation of NRC requirements occurred.

Inspection Report# : [2002013\(pdf\)](#)

Mitigating Systems

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Emergency Diesel Generator Safety-Related Protective Relay Calibration Procedure Inadequacies

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements for inadequate emergency diesel generator (EDG) safety-related protective relay calibration procedures which contained quantitative acceptance criteria limits that did not correspond to vendor recommended values. The primary cause of this finding was related to the cross-cutting area of human performance.

Despite multiple opportunities for procedure writers, technical reviewers, relay technicians, maintenance work planners, electrical maintenance first-line supervisors, and operations personnel to have identified these errors, each of the four procedures used to calibrate the EDG safety-related protective relays were found to contain similar quantitative acceptance criteria errors. This finding was more than minor because it: 1) affected the mitigating systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events, and 2) if left uncorrected, would become a more significant safety concern in subsequent years if out-of-specification EDG safety-related protective relay settings affecting equipment operability and electrical distribution system coordination were left in service and not corrected. The finding was determined to be of very low risk significance since the inadequate procedures did not result in a design or qualification deficiency, an actual loss of the safety function, or involve internal or external initiating events.

Inspection Report# : [2003002\(pdf\)](#)

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: FIN Finding

G-05 Gas Turbine Generator Return-To-Service Prior to Completion of Troubleshooting and Maintenance Activities

The inspectors identified a finding of very low risk significance finding concerning the return to service of the G-05 gas turbine (GT) generator prior to completion of troubleshooting efforts involving starting diesel oil samples and certain maintenance activities. The primary cause of this finding was related to the cross-cutting area of human performance in that lack of interdepartmental communications and coordination caused the GT to be inappropriately returned to service on March 3, 2003, despite starting diesel analyses that indicated advanced oil degradation and the onset of bearing damage and no return-to-service testing requirements having been defined in the maintenance department troubleshooting plan. The inspectors determined that the issue was more than minor because it affected the availability, reliability, and capability of the G-05 GT, a mitigating system. The finding was of very low safety significance since the inappropriate return-to-service did not result in a design or qualification deficiency, an actual loss of the safety function, or involve internal or external initiating events. No violation of NRC requirements occurred.

Inspection Report# : [2003002\(pdf\)](#)

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Reoccurring Facade Freeze Protection System Deficiencies

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified through a self-revealing event on February 11, 2003, when one of the main control board indications associated with Unit 1 'B' main steam line pressure began reading higher than the other two. The higher pressure indicated the formation of an ice plug associated with pressure transmitter IPT-483, a transmitter providing input to the engineering safeguards system. The primary cause of this finding was related to the cross-cutting area of human performance in that lack of facade freeze protection system coordination and training in the areas of lagging deficiencies and facade freeze system

operations resulted in the removal of one of the three main steam line pressure inputs to the engineering safeguards system, a system relied upon to mitigate the consequences of a design basis accident. The inspectors determined that the facade freeze protection issues were more than minor because: 1) they had affected the availability, reliability, and capability of an input to the engineering safeguards system, a system relied upon to mitigate the consequences of a design basis accident; and 2) if left uncorrected, they would become a more significant concern in subsequent years if freezing of sensing lines resulted in the inability to mitigate the consequences of an accident. The finding was determined to be of very low risk significance since the facade freeze protection issues did not result in a design or qualification deficiency, an actual loss of the safety function, or meet any of the internal or external event screening criteria.

Inspection Report# : [2003002\(pdf\)](#)

Significance:  Sep 30, 2002

Identified By: NRC

Item Type: FIN Finding

Conduct of a Partial G02 EDG Safety Injection Test Based on an Inadequate Assessment

The inspectors identified a finding of very low safety significance (Green) concerning the conduct of a partial G02 emergency diesel generator safety injection test while in Mode 1 based on an incomplete and inadequate assessment required by Technical Specification surveillance requirement 3.8.1.5. The finding was determined not to involve a violation of regulatory requirements due to the simplicity of the test and the quality of the pre-job briefing, which effectively met the Technical Specification requirements. The finding was determined to be of very low risk significance since the inadequate assessment did not result in a design or qualification deficiency, an actual loss of the safety function, or involve internal or external initiating events.

Inspection Report# : [2002010\(pdf\)](#)

Significance:  Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Untimely Development and Approval of (a) (1) Action Plan for Gas Turbine, G05

The inspectors identified a Non-Cited Violation of 10 CFR 50.65(a)(1) concerning the failure to set (a)(1) goals and monitor against the established goals for the G05 gas turbine (GT), a risk significant maintenance rule component relied upon to meet station blackout and certain Appendix R requirements. The issue of failing to set G05 GT (a)(1) goals and monitor against the established goals was more than minor since actual G05 GT equipment problems occurred. However, since the G05 equipment problems were not attributable to a 10 CFR 50.65(a)(1) violation, rather, a maintenance rule violation occurred as a consequence of the G05 GT problems, the performance deficiency could not be processed through the Manual Chapter 0609, "Significance Determination Process." Therefore, in accordance with Appendix B to Inspection Manual Chapter 0612, this maintenance rule violation was considered to be of very low safety significance.

Inspection Report# : [2002010\(pdf\)](#)

Significance:  Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Use of Steam Generator Narrow Range Level Detector During Cold Shutdown Plant Conditions

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements for an inadequate shutdown emergency procedure which failed to account for the impact of varying water density differences on the steam generator narrow range level detector variable leg when transitioning from hot to cold plant conditions. Specifically, safety-related shutdown emergency procedures contained operator

instructions that could have caused the top of the steam generator U-tubes to become uncovered, thereby affecting the ability of the steam generators to function as a heat sink for removing reactor decay heat. The finding was of very low risk significance since NRC senior risk analysts determined that the discrepancy associated with the steam generator narrow range level indication would not have appreciably impacted steam generator heat removal capabilities.

Inspection Report# : [2002010\(pdf\)](#)



Significance: Aug 09, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Emergency Operating Procedures Incorrectly Translated From Design Basis of the Safety Injection System

The inspectors identified a Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." Several specific emergency operating procedure (EOP) deficiencies were identified during the inspection. The finding was considered to be greater than minor because the failure of licensee personnel to take appropriate actions under post-accident conditions could have resulted in system operating modes that had not been analyzed, and could have affected the performance of safety-related components and had a credible impact on safety. Because there was no actual failure of safety-related components associated with the mitigating systems cornerstone, the finding is considered to be of very low safety significance

Inspection Report# : [2002009\(pdf\)](#)



Significance: Aug 09, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective Actions Were Inadequate to Ensure Accurate Calculations For RWST Water Level

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action") where the licensee failed to take adequate corrective actions to resolve previously identified problems with the plant's engineering calculations concerning refueling water storage tank (RWST) water levels. The finding was considered to be greater than minor because licensee personnel failed to correct repetitive RWST calculation errors, which resulted in the propagation of erroneous RWST elevation vs. level data into inputs to other calculations. Inaccurate level indications were provided to the control room operators during performance of emergency operating procedures (EOPs). The failure to provide the operator with accurate RWST level indications during the performance of EOPs during a potential loss of coolant accident could have adversely affected the performance of safety-related components and had a credible impact on safety. Because there was no actual failure of safety-related components associated with the mitigating systems cornerstone, the finding is considered to be of very low safety significance

Inspection Report# : [2002009\(pdf\)](#)



Significance: Feb 28, 2002

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance

and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002. Inspection Report 50-266/02-15; 50-301/02-15, issued April 2, 2003, documented the NRC decision that this finding is not an Old Design Issue.

Inspection Report# : [2001017\(pdf\)](#)

Barrier Integrity

Significance:  Dec 28, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Pressurizer Safety Valve Failed to Lift at Test Pressure

The inspectors identified a Non-Cited Violation of Technical Specification 3.4.10 for the operation of Unit 2 from December 2000 to April 2002 with one inoperable pressurizer safety valve. The primary cause of this finding was related to the cross-cutting area of human performance, in that, inattention to the job-at-hand resulted in a vendor reassembling the valve such that it would not have lifted at the required setpoint. The inspectors determined that the issue was more than minor because it affected the functionality of the reactor coolant system pressure boundary, a physical barrier designed to protect the public from radionuclide releases caused by accidents or events. However, the finding was of very low risk significance since the change in core damage frequency as a result of having operated with the inoperable safety valve was determined to be less than 1E-6/year.

Inspection Report# : [2002013\(pdf\)](#)

Emergency Preparedness

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: FIN Finding

Emergency Notification System Power Failure

The inspectors identified one finding of very low risk significance for not having adequate configuration control and not providing sufficient drawings and instructions to maintenance and operations personnel during an emergency notification telephone system battery charger failure and subsequent replacement activities. The primary cause of this finding was related to the cross-cutting area of human performance in that a lack of understanding of the basic system configuration and the absence of associated drawings and operating instructions resulted in unnecessary periods of system unavailability. The inspectors determined that the issue was more than minor because: 1) it affected the emergency preparedness cornerstone equipment and communications system attribute, and 2) if left uncorrected, would become a more significant safety concern if emergency response facility communication system modifications were made without the licensee's knowledge such that a reduction in emergency planning effectiveness occurred. Based on the answers to the Inspection Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process," screening questions, the inspectors determined that the issue was of very low safety

significance. No violation of regulatory requirements occurred
Inspection Report# : [2003002\(pdf\)](#)



Significance: Apr 01, 2002

Identified By: NRC

Item Type: FIN Finding

Inadequate Critique of Two Exercise Performance Issues

Two exercise performance issues, which are associated with emergency preparedness planning standard 10 CFR 50.47 (b)(10), were inadequately critiqued by licensee staff. The first issue was associated with the licensee's critique of the initial offsite Protective Action Recommendation (PAR) that its exercise participants communicated to offsite officials. The NRC identified issues that contradicted the licensee's critique conclusion that the initial PAR was a successful performance indicator opportunity with respect to its content. The second issue was the licensee's critique of its participants decision making process on the simulated removal from the site of non-essential personnel, who were not members of the current shift of emergency responders, once all onsite personnel were accounted for. Using the Emergency Preparedness Significance Determination Process, the NRC has made a preliminary determination that the finding was of low to moderate risk significance (White). In accordance with NRC's Enforcement Policy, as published in NUREG 1600, it was determined that there is no apparent violation of NRC requirements since the critique issues were related to an exercise, rather than to an actual emergency. On September 12, 2002, the NRC provided the licensee with a letter detailing the final results of the NRC's significance determination of the February 2002 Exercise critique finding. Based on the information obtained during the inspection, including the feedback obtained from the licensee during the April 2002 exit interview, and the additional information contained in the licensee's June 27, 2002 submittal, the NRC concluded that the inspection finding is appropriately characterized as a White finding.

Inspection Report# : [2002004\(pdf\)](#)

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Miscellaneous

Last modified : May 30, 2003

Point Beach 2

2Q/2003 Plant Inspection Findings

Initiating Events

Significance:  Dec 28, 2002

Identified By: NRC

Item Type: FIN Finding

Inadequate and Untimely Corrective Actions For Flooding of Manholes Containing Cables

One finding of very low risk significance was identified by the inspectors for the licensee's failure to establish timely and adequate corrective actions to address the flooding of manholes which contained both safety and non-safety related systems, structures, and components. The inspectors identified that the licensee had not implemented effective corrective actions to address long-standing problems with flooding in manholes and had deferred the implementation of corrective actions with insufficient basis. The finding was more than minor because, if left uncorrected, it would become a more significant concern since the lack of effective corrective actions to inspect and pump out water in manholes could affect safety-related cables routed through manholes such as those for service water pumps.

Additionally, some of the cables routed in manholes provide power to safety-related buses from the licensee's offsite power systems. Hence, the loss of such power, due to cable failures, could result in momentary loss of power to the bus and the inability to re-energize the affected buses from the normal power source. This issue was categorized as a finding of very low risk significance since the identified water intrusion conditions had not caused any safety-related equipment failures at this time. No violation of NRC requirements occurred.

Inspection Report# : [2002013\(pdf\)](#)

Significance:  Dec 28, 2002

Identified By: NRC

Item Type: FIN Finding

Insufficient Preparation for Cold Weather Conditions

A finding of very low significance was identified for not sufficiently coordinating and being adequately prepared for the onset of cold weather prior to November 1, 2002, a point at which the Point Beach Nuclear Plant had experienced 30 hours of below freezing temperatures over 6 nights. The primary cause of this finding was related to the cross-cutting area of human performance. Despite beginning freeze protection activities at an appropriate time, lack of coordination between licensee departments resulted in incomplete preparations prior to the onset of freezing temperatures. The inspectors determined that the issue was more than minor because it increased the likelihood of those events that upset plant stability during power operations and would, if left uncorrected, become a more significant safety concern in subsequent years if more safety-related systems were to be affected. The finding was of very low safety significance because no safety-related functions or mitigating systems were rendered inoperable. No violation of NRC requirements occurred.

Inspection Report# : [2002013\(pdf\)](#)

Mitigating Systems

Significance:  Jun 30, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement Risk Management Actions for Components Made Unavailable by Pre-Planned Work Activities

The inspectors identified a Non-Cited Violation of 10 CFR 50.65(a)(4) for failure to implement required risk management actions during calibration of volume control tank level transmitters during September 2002 and January 2003. The primary cause of this finding was related to the cross-cutting area of human performance in that probabilistic risk assessment, production planning, and on-shift personnel had not utilized the full capabilities of the risk assessment tool to recognize the unavailability of components associated with pre-planned work activities. The finding is greater than minor because, if left uncorrected, it would become a more significant safety concern if risk assessments that had not considered the impact of equipment and components rendered unavailable by pre-planned activities resulted in high risk levels without compensatory risk management analyses in place. The finding is of very low significance because it was not a design or qualification deficiency, did not represent an actual loss of the safety function, and did not involve internal or external initiating events.

Inspection Report# : [2003003\(pdf\)](#)

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Emergency Diesel Generator Safety-Related Protective Relay Calibration Procedure Inadequacies

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements for inadequate emergency diesel generator (EDG) safety-related protective relay calibration procedures which contained quantitative acceptance criteria limits that did not correspond to vendor recommended values. The primary cause of this finding was related to the cross-cutting area of human performance. Despite multiple opportunities for procedure writers, technical reviewers, relay technicians, maintenance work planners, electrical maintenance first-line supervisors, and operations personnel to have identified these errors, each of the four procedures used to calibrate the EDG safety-related protective relays were found to contain similar quantitative acceptance criteria errors. This finding was more than minor because it: 1) affected the mitigating systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events, and 2) if left uncorrected, would become a more significant safety concern in subsequent years if out-of-specification EDG safety-related protective relay settings affecting equipment operability and electrical distribution system coordination were left in service and not corrected. The finding was determined to be of very low risk significance since the inadequate procedures did not result in a design or qualification deficiency, an actual loss of the safety function, or involve internal or external initiating events.

Inspection Report# : [2003002\(pdf\)](#)

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: FIN Finding

G-05 Gas Turbine Generator Return-To-Service Prior to Completion of Troubleshooting and Maintenance Activities

The inspectors identified a finding of very low risk significance finding concerning the return to service of the G-05 gas turbine (GT) generator prior to completion of troubleshooting efforts involving starting diesel oil samples and certain maintenance activities. The primary cause of this finding was related to the cross-cutting area of human performance in that lack of interdepartmental communications and coordination caused the GT to be inappropriately returned to service on March 3, 2003, despite starting diesel analyses that indicated advanced oil degradation and the onset of bearing

damage and no return-to-service testing requirements having been defined in the maintenance department troubleshooting plan. The inspectors determined that the issue was more than minor because it affected the availability, reliability, and capability of the G-05 GT, a mitigating system. The finding was of very low safety significance since the inappropriate return-to-service did not result in a design or qualification deficiency, an actual loss of the safety function, or involve internal or external initiating events. No violation of NRC requirements occurred.

Inspection Report# : [2003002\(pdf\)](#)



Significance: Mar 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Reoccurring Facade Freeze Protection System Deficiencies

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified through a self-revealing event on February 11, 2003, when one of the main control board indications associated with Unit 1 'B' main steam line pressure began reading higher than the other two. The higher pressure indicated the formation of an ice plug associated with pressure transmitter IPT-483, a transmitter providing input to the engineering safeguards system. The primary cause of this finding was related to the cross-cutting area of human performance in that lack of facade freeze protection system coordination and training in the areas of lagging deficiencies and facade freeze system operations resulted in the removal of one of the three main steam line pressure inputs to the engineering safeguards system, a system relied upon to mitigate the consequences of a design basis accident. The inspectors determined that the facade freeze protection issues were more than minor because: 1) they had affected the availability, reliability, and capability of an input to the engineering safeguards system, a system relied upon to mitigate the consequences of a design basis accident; and 2) if left uncorrected, they would become a more significant concern in subsequent years if freezing of sensing lines resulted in the inability to mitigate the consequences of an accident. The finding was determined to be of very low risk significance since the facade freeze protection issues did not result in a design or qualification deficiency, an actual loss of the safety function, or meet any of the internal or external event screening criteria.

Inspection Report# : [2003002\(pdf\)](#)



Significance: Mar 24, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

NCV of 10 CFR Part 50, Appendix B, Criterion VI, for the failure to distribute temporary procedure changes to procedure sets in emergency response facilities

The inspectors identified two issues that were treated as one Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion VI, "Document Control." First, emergency and abnormal procedures in two emergency response facilities were not included as part of the temporary change distribution process. Second, no controls were in place to ensure that the scope of distribution of temporary procedure changes was appropriate. The finding was of very low risk significance because the licensee distributed the documents to the facilities prior to any facility activation and the need to use the procedures. Based upon the results of these inspections, we have concluded that the Red inspection finding, which involved the potential common mode failure of the AFW pumps due to inadequate operator response to a loss of instrument air (IA), will not be treated as an old design issue. As detailed in Section 6.06.a of Manual Chapter 0305, there are four criteria that must be met for the NRC to classify a problem as an old design issue and thus allow the NRC to not consider the finding in its assessment of Point Beach's overall performance. The inspections identified that the criterion pertaining to corrective action was not met in that the implementation of corrective action associated with your evaluation of the AFW/IA issue did not prevent recurrence of another, separate potential common mode failure of the AFW pumps. The failure to implement thorough and complete corrective actions became apparent during our review of the October 2002 AFW recirculation line orifice plugging issue and the identification of other problems related to AFW design. These problems included the use of a nonsafety-related power supply for relays associated with

the proper operation of the AFW recirculation line air-operated flow control valves and the single electrical bus dependencies of three of the four recirculation line air-operated flow control valves and three of the four service water supply motor-operated valves. Because the AFW/IA Red finding did not meet the criteria for consideration as an old design issue, Point Beach is in the Multiple/Repetitive Degraded Cornerstone Column of the Action Matrix of Manual Chapter 0305.

Inspection Report# : [2002015\(pdf\)](#)



Significance: Mar 24, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

NCV of 10 CFR Part 50, Appendix B, Criterion V, for inadequate procedure for calibration of auxiliary feedwater flow meter

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for a procedure which directed the use of a flow instrument for the turbine-driven AFW pump recirculation line in a range for which it was not calibrated. The finding was of very low risk significance because follow-up calibration indicated that the instrument was reliable in the range in which it was to be used, and the inspectors concluded that it could have been used to accurately determine the AFW flow.

Inspection Report# : [2002015\(pdf\)](#)

Significance: TBD Mar 24, 2003

Identified By: NRC

Item Type: AV Apparent Violation

Apparent violation of 10 CFR Part 50, Appendix B, Criterion III, for the failure to establish the appropriate design control measures for the installation of orifices to the AFW recirculation lines

An apparent violation was identified, in part, through a self-revealing event when decreased auxiliary feedwater pump recirculation flow was noted during post-maintenance testing. Subsequent licensee and NRC review of the event determined that the licensee had installed incorrectly designed orifices in each of the pump recirculation lines. The orifices, due to small clearances, were susceptible to plugging. The primary causes of this finding were inadequacies in the licensee's design process and the licensee's implementation of the process, including the identification of system design requirements and the development of supporting safety evaluations. The issue has been preliminarily determined to have high safety significance (Red). Following installation of the inadequately designed orifices, the entire auxiliary feedwater system was susceptible to a common mode failure during operations using service water. Failure of auxiliary feedwater during several initiating events could lead to core damage. The installation of the incorrectly designed orifices in the recirculation lines is an apparent violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

Inspection Report# : [2002015\(pdf\)](#)

Significance: N/A Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

The failure to identify the root cause and implement corrective actions for the AFW/IA issue, a significant condition adverse to quality, so as to prevent recurrence.

A violation was identified for the licensee's failure to implement adequate corrective actions to effectively address a previous Red finding and preclude recurrence (Inspection Report 50-266/01-17; 50-301/01-17). Specifically, the licensee failed to identify potential common mode failures that existed involving power supplies to the recirculation line air-operated valve and other system components. In addition, the licensee's corrective actions for the potential common mode failure associated with a loss of instrument air did not preclude repetition. Specifically, the licensee's corrective actions, to upgrade the safety function of the air-operated recirculation valve, failed to ensure that successful operation of the recirculation line air-operated valve was dependent only on safety-related support systems. Following

the corrective actions, successful operation of the valve was still dependent upon nonsafety-related power to an interposing relay. Additionally, the corrective actions failed to discover a single failure mechanism involving a system orifice modification. The issue was more than minor because the failure to implement appropriate corrective actions resulted in the auxiliary feedwater system continuing to rely on nonsafety-related support systems and to be susceptible to a single event causing a total system failure. The failure of nonsafety-related support systems and single event failures are an expected condition during several design basis accidents and should not cause a safety system to fail. The failure of the licensee to implement adequate corrective actions is a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action." This violation is associated with a previously identified RED finding (IR 50-266;50-30/01-17).

Inspection Report# : [2002015\(pdf\)](#)

G

Significance: Sep 30, 2002

Identified By: NRC

Item Type: FIN Finding

Conduct of a Partial G02 EDG Safety Injection Test Based on an Inadequate Assessment

The inspectors identified a finding of very low safety significance (Green) concerning the conduct of a partial G02 emergency diesel generator safety injection test while in Mode 1 based on an incomplete and inadequate assessment required by Technical Specification surveillance requirement 3.8.1.5. The finding was determined not to involve a violation of regulatory requirements due to the simplicity of the test and the quality of the pre-job briefing, which effectively met the Technical Specification requirements. The finding was determined to be of very low risk significance since the inadequate assessment did not result in a design or qualification deficiency, an actual loss of the safety function, or involve internal or external initiating events.

Inspection Report# : [2002010\(pdf\)](#)

G

Significance: Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Untimely Development and Approval of (a) (1) Action Plan for Gas Turbine, G05

The inspectors identified a Non-Cited Violation of 10 CFR 50.65(a)(1) concerning the failure to set (a)(1) goals and monitor against the established goals for the G05 gas turbine (GT), a risk significant maintenance rule component relied upon to meet station blackout and certain Appendix R requirements. The issue of failing to set G05 GT (a)(1) goals and monitor against the established goals was more than minor since actual G05 GT equipment problems occurred. However, since the G05 equipment problems were not attributable to a 10 CFR 50.65(a)(1) violation, rather, a maintenance rule violation occurred as a consequence of the G05 GT problems, the performance deficiency could not be processed through the Manual Chapter 0609, "Significance Determination Process." Therefore, in accordance with Appendix B to Inspection Manual Chapter 0612, this maintenance rule violation was considered to be of very low safety significance.

Inspection Report# : [2002010\(pdf\)](#)

G

Significance: Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Use of Steam Generator Narrow Range Level Detector During Cold Shutdown Plant Conditions

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements for an inadequate shutdown emergency procedure which failed to account for the impact of varying water density differences on the steam generator narrow range level detector variable leg when transitioning from hot to cold plant conditions. Specifically, safety-related shutdown emergency procedures contained operator

instructions that could have caused the top of the steam generator U-tubes to become uncovered, thereby affecting the ability of the steam generators to function as a heat sink for removing reactor decay heat. The finding was of very low risk significance since NRC senior risk analysts determined that the discrepancy associated with the steam generator narrow range level indication would not have appreciably impacted steam generator heat removal capabilities.

Inspection Report# : [2002010\(pdf\)](#)



Significance: Aug 09, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Emergency Operating Procedures Incorrectly Translated From Design Basis of the Safety Injection System

The inspectors identified a Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." Several specific emergency operating procedure (EOP) deficiencies were identified during the inspection. The finding was considered to be greater than minor because the failure of licensee personnel to take appropriate actions under post-accident conditions could have resulted in system operating modes that had not been analyzed, and could have affected the performance of safety-related components and had a credible impact on safety. Because there was no actual failure of safety-related components associated with the mitigating systems cornerstone, the finding is considered to be of very low safety significance

Inspection Report# : [2002009\(pdf\)](#)



Significance: Aug 09, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective Actions Were Inadequate to Ensure Accurate Calculations For RWST Water Level

The inspectors identified a Non-Cited Violation (10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action") where the licensee failed to take adequate corrective actions to resolve previously identified problems with the plant's engineering calculations concerning refueling water storage tank (RWST) water levels. The finding was considered to be greater than minor because licensee personnel failed to correct repetitive RWST calculation errors, which resulted in the propagation of erroneous RWST elevation vs. level data into inputs to other calculations. Inaccurate level indications were provided to the control room operators during performance of emergency operating procedures (EOPs). The failure to provide the operator with accurate RWST level indications during the performance of EOPs during a potential loss of coolant accident could have adversely affected the performance of safety-related components and had a credible impact on safety. Because there was no actual failure of safety-related components associated with the mitigating systems cornerstone, the finding is considered to be of very low safety significance

Inspection Report# : [2002009\(pdf\)](#)



Significance: Feb 28, 2002

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance

and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002. Inspection Report 50-266/02-15; 50-301/02-15, issued April 2, 2003, documented the NRC decision that this finding is not an Old Design Issue.

Inspection Report# : [2001017\(pdf\)](#)

Inspection Report# : [2003003\(pdf\)](#)

Barrier Integrity

Significance:  Dec 28, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Pressurizer Safety Valve Failed to Lift at Test Pressure

The inspectors identified a Non-Cited Violation of Technical Specification 3.4.10 for the operation of Unit 2 from December 2000 to April 2002 with one inoperable pressurizer safety valve. The primary cause of this finding was related to the cross-cutting area of human performance, in that, inattention to the job-at-hand resulted in a vendor reassembling the valve such that it would not have lifted at the required setpoint. The inspectors determined that the issue was more than minor because it affected the functionality of the reactor coolant system pressure boundary, a physical barrier designed to protect the public from radionuclide releases caused by accidents or events. However, the finding was of very low risk significance since the change in core damage frequency as a result of having operated with the inoperable safety valve was determined to be less than 1E-6/year.

Inspection Report# : [2002013\(pdf\)](#)

Emergency Preparedness

Significance: N/A Apr 15, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Decreased an Emergency Plan Commitment Without Prior NRC Approval

In October 1998, the licensee decreased its Emergency Plan's effectiveness without prior NRC approval due to an inadequate 10 CFR 50.54(q) review of six Emergency Response Organization (ERO) positions, which the licensee re-categorized from being 30 minute response positions to be 60 minute response positions. These six positions were re-established as 30 minute response positions in late January 2003. This Severity Level IV violation is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2002014\(pdf\)](#)

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: FIN Finding

Emergency Notification System Power Failure

The inspectors identified one finding of very low risk significance for not having adequate configuration control and not providing sufficient drawings and instructions to maintenance and operations personnel during an emergency notification telephone system battery charger failure and subsequent replacement activities. The primary cause of this finding was related to the cross-cutting area of human performance in that a lack of understanding of the basic system configuration and the absence of associated drawings and operating instructions resulted in unnecessary periods of system unavailability. The inspectors determined that the issue was more than minor because: 1) it affected the emergency preparedness cornerstone equipment and communications system attribute, and 2) if left uncorrected, would become a more significant safety concern if emergency response facility communication system modifications were made without the licensee's knowledge such that a reduction in emergency planning effectiveness occurred. Based on the answers to the Inspection Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process," screening questions, the inspectors determined that the issue was of very low safety significance. No violation of regulatory requirements occurred

Inspection Report# : [2003002\(pdf\)](#)

Occupational Radiation Safety



Significance: Jun 30, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Need for a Unit 2 Containment Cooling Fan Discharge Damper Temporary Modification Not Identified in a Timely Manner

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for not taking appropriate and timely corrective actions to fully assess and correct degraded conditions associated with the safety-related Unit 2 containment cooling fan backdraft damper, 2W-1D2-A, during thermal performance testing activities on March 20, 2003. The primary cause of this finding was related to the cross-cutting area of human performance. Despite the involvement of the test coordinator, control room operating supervisor, and system engineer, incomplete communications and coordination resulted in damper parts on the cooling fan plenum floor not being fully identified as components affecting operation of the safety-related damper. The condition adverse to quality was identified 13 days later when, on April 2, 2003, a mechanic passing through a radiologically controlled machine shop, identified the damper counterweight amongst other controlled material. The finding was more than minor because: 1) it affected the reactor safety barrier integrity cornerstone objective of maintaining the functionality of primary containment, in that the reliability and availability of the Unit 2, 'D' containment cooling fan, a risk significant large-early-release component, was affected, and 2) if left uncorrected, would become a more significant safety concern if components relied upon to perform safety-related functions were returned to service prior to fully assessing and correcting degraded conditions. The finding was determined to be of very low risk significance since the degraded backdraft damper did not represent a degradation of the radiological barrier function of the control room, auxiliary building, or spent fuel pool; did not represent degradation of the barrier function of the control room against smoke or a toxic atmosphere; and did not represent an actual open pathway in the physical integrity of reactor containment or an actual reduction of the atmospheric pressure control function of the reactor containment.

Inspection Report# : [2003003\(pdf\)](#)

Public Radiation Safety

Physical Protection

Miscellaneous

Last modified : September 05, 2003

Point Beach 2

3Q/2003 Plant Inspection Findings

Initiating Events

Significance:  Sep 30, 2003

Identified By: NRC

Item Type: FIN Finding

Unit 2 SI During Start-up

A finding of very low safety significance was self-revealed when Unit 2 operators failed to identify that the main feedwater regulating valves (MFRVs) were in the automatic mode with a signal to open when the reactor trip breakers were closed during a reactor startup. The resultant flow of lower temperature water into the steam generators reduced reactor coolant system (RCS) temperatures causing pressurizer level to decrease to the point that operators initiated a manual safety injection (SI) and reactor trip signal. The primary cause of this finding was related to the cross-cutting area of human performance. Despite at least four licensed reactor operators having discussed the abnormality of leaving the MFRVs in the automatic mode with senior reactor operators prior to the reactor startup attempt, no changes were made. In addition, the entire operations crew on the evening of July 11, 2003, failed to recognize the expected system responses when closing the reactor trip breakers.

The inspectors determined that the finding was more than minor because it: (1) involved the configuration control and human performance attributes of the Initiating Events cornerstone; and (2) affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown operations. The finding was of very low safety significance because it did not contribute to the likelihood of a primary or secondary system loss-of-coolant accident (LOCA), did not contribute to both the likelihood of a reactor trip and mitigating equipment unavailability, and did not increase the likelihood of a fire or flooding event. No violation of NRC requirements occurred.

Inspection Report# : [2003004\(pdf\)](#)

Significance:  Dec 28, 2002

Identified By: NRC

Item Type: FIN Finding

Inadequate and Untimely Corrective Actions For Flooding of Manholes Containing Cables

One finding of very low risk significance was identified by the inspectors for the licensee's failure to establish timely and adequate corrective actions to address the flooding of manholes which contained both safety and non-safety related systems, structures, and components. The inspectors identified that the licensee had not implemented effective corrective actions to address long-standing problems with flooding in manholes and had deferred the implementation of corrective actions with insufficient basis.

The finding was more than minor because, if left uncorrected, it would become a more significant concern since the lack of effective corrective actions to inspect and pump out water in manholes could affect safety-related cables routed through manholes such as those for service water pumps. Additionally, some of the cables routed in manholes provide power to safety-related buses from the licensee's offsite power systems. Hence, the loss of such power, due to cable failures, could result in momentary loss of power to the bus and the inability to re-energize the affected buses from the normal power source. This issue was categorized as a finding of very low risk significance since the identified water

intrusion conditions had not caused any safety-related equipment failures at this time. No violation of NRC requirements occurred.

Inspection Report# : [2002013\(pdf\)](#)

Significance:  Dec 28, 2002

Identified By: NRC

Item Type: FIN Finding

Insufficient Preparation for Cold Weather Conditions

A finding of very low significance was identified for not sufficiently coordinating and being adequately prepared for the onset of cold weather prior to November 1, 2002, a point at which the Point Beach Nuclear Plant had experienced 30 hours of below freezing temperatures over 6 nights. The primary cause of this finding was related to the cross-cutting area of human performance. Despite beginning freeze protection activities at an appropriate time, lack of coordination between licensee departments resulted in incomplete preparations prior to the onset of freezing temperatures.

The inspectors determined that the issue was more than minor because it increased the likelihood of those events that upset plant stability during power operations and would, if left uncorrected, become a more significant safety concern in subsequent years if more safety-related systems were to be affected. The finding was of very low safety significance because no safety-related functions or mitigating systems were rendered inoperable. No violation of NRC requirements occurred.

Inspection Report# : [2002013\(pdf\)](#)

Mitigating Systems

Significance:  Sep 30, 2003

Identified By: NRC

Item Type: FIN Finding

Operating Test Grading Disagreement

The inspectors identified a finding of very low risk significance concerning a grading discrepancy between the facility licensee and the NRC inspectors during the NRC licensed operator requalification annual operating test. The grading disagreement involved a pass-fail decision on one operating crew and two licensed operators' performance during the simulator scenario portion of the operating test. Specifically, the crew inadequately diagnosed and mitigated a component cooling water leak event which later caused an unexpected manual reactor trip. In addition, the senior operator, while implementing the Emergency Plan, failed to make proper and accurate off-site notifications. The licensee failed to adequately assess the pass/fail evaluation for the poor performance by the crew and operators that would have potentially resulted in an operational test failure.

This finding was considered more than minor because improper grading of a crew or an individual was considered a risk important issue in that operators or crews with unsatisfactory performance could be placed on shift without proper remediation. Furthermore, there was the realistic potential of providing negative training based on improper assessment of operator performance. Specifically, poor performance on the simulator could potentially lead to improper operator actions on the actual plant. The finding was of very low safety significance because the poor performance and incorrect actions were on the simulator and not on the actual plant. Furthermore, no actual plant emergency occurred and there was no actual impact on equipment or personnel safety. No violation of regulatory requirements occurred.

Inspection Report# : [2003004\(pdf\)](#)

Significance:  Sep 30, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Required Performance Testing Per 10 CFR 55.46

The inspectors identified a Non-Cited Violation (NCV) of 10 CFR 55.46(d)(1), "Continued Assurance of Simulator Fidelity." The inspectors identified one example of failure to meet the performance requirements in maintaining simulator fidelity throughout the life of the simulation facility. Specifically, the facility licensee failed to conduct one particular performance test throughout the life of the simulator (since 1991) in accordance with the committed testing requirements of ANSI/ANS-3.5-1985, "Nuclear Power Plant Simulators for Use in Operator Training."

This finding was considered more than minor because of the realistic potential of providing negative training based on simulator deficiencies compared to the actual plant existed. Specifically, inadequate testing of the simulator to assure that the simulator appropriately replicated the actual plant could potentially have affected operator actions on the actual plant. The finding was of very low safety significance because the discrepancy was on the simulator and the actual plant functioned properly. Furthermore, no actual plant emergency occurred and there was no actual impact on equipment or personnel safety.

Inspection Report# : [2003004\(pdf\)](#)

Significance:  Jun 30, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement Risk Management Actions for Components Made Unavailable by Pre-Planned Work Activities

The inspectors identified a Non-Cited Violation of 10 CFR 50.65(a)(4) for failure to implement required risk management actions during calibration of volume control tank level transmitters during September 2002 and January 2003. The primary cause of this finding was related to the cross-cutting area of human performance in that probabilistic risk assessment, production planning, and on-shift personnel had not utilized the full capabilities of the risk assessment tool to recognize the unavailability of components associated with pre-planned work activities.

The finding is greater than minor because, if left uncorrected, it would become a more significant safety concern if risk assessments that had not considered the impact of equipment and components rendered unavailable by pre-planned activities resulted in high risk levels without compensatory risk management analyses in place. The finding is of very low significance because it was not a design or qualification deficiency, did not represent an actual loss of the safety function, and did not involve internal or external initiating events.

Inspection Report# : [2003003\(pdf\)](#)

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Emergency Diesel Generator Safety-Related Protective Relay Calibration Procedure Inadequacies

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements for inadequate emergency diesel generator (EDG) safety-related protective relay calibration procedures which contained quantitative acceptance criteria limits that did not correspond to vendor recommended values. The primary cause of this finding was related to the cross-cutting area of human performance. Despite multiple opportunities for procedure writers, technical reviewers, relay technicians, maintenance work planners, electrical maintenance first-line supervisors, and operations personnel to have identified these errors, each of the four procedures used to calibrate the EDG safety-related protective relays were found to contain similar quantitative

acceptance criteria errors.

This finding was more than minor because it: 1) affected the mitigating systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events, and 2) if left uncorrected, would become a more significant safety concern in subsequent years if out-of-specification EDG safety-related protective relay settings affecting equipment operability and electrical distribution system coordination were left in service and not corrected. The finding was determined to be of very low risk significance since the inadequate procedures did not result in a design or qualification deficiency, an actual loss of the safety function, or involve internal or external initiating events.

Inspection Report# : [2003002\(pdf\)](#)

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: FIN Finding

G-05 Gas Turbine Generator Return-To-Service Prior to Completion of Troubleshooting and Maintenance Activities

The inspectors identified a finding of very low risk significance finding concerning the return to service of the G-05 gas turbine (GT) generator prior to completion of troubleshooting efforts involving starting diesel oil samples and certain maintenance activities. The primary cause of this finding was related to the cross-cutting area of human performance in that lack of interdepartmental communications and coordination caused the GT to be inappropriately returned to service on March 3, 2003, despite starting diesel analyses that indicated advanced oil degradation and the onset of bearing damage and no return-to-service testing requirements having been defined in the maintenance department troubleshooting plan.

The inspectors determined that the issue was more than minor because it affected the availability, reliability, and capability of the G-05 GT, a mitigating system. The finding was of very low safety significance since the inappropriate return-to-service did not result in a design or qualification deficiency, an actual loss of the safety function, or involve internal or external initiating events. No violation of NRC requirements occurred.

Inspection Report# : [2003002\(pdf\)](#)

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Reoccurring Facade Freeze Protection System Deficiencies

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified through a self-revealing event on February 11, 2003, when one of the main control board indications associated with Unit 1 'B' main steam line pressure began reading higher than the other two. The higher pressure indicated the formation of an ice plug associated with pressure transmitter IPT-483, a transmitter providing input to the engineering safeguards system. The primary cause of this finding was related to the cross-cutting area of human performance in that lack of facade freeze protection system coordination and training in the areas of lagging deficiencies and facade freeze system operations resulted in the removal of one of the three main steam line pressure inputs to the engineering safeguards system, a system relied upon to mitigate the consequences of a design basis accident.

The inspectors determined that the facade freeze protection issues were more than minor because: 1) they had affected the availability, reliability, and capability of an input to the engineering safeguards system, a system relied upon to mitigate the consequences of a design basis accident; and 2) if left uncorrected, they would become a more significant concern in subsequent years if freezing of sensing lines resulted in the inability to mitigate the consequences of an accident. The finding was determined to be of very low risk significance since the facade freeze protection issues did

not result in a design or qualification deficiency, an actual loss of the safety function, or meet any of the internal or external event screening criteria.

Inspection Report# : [2003002\(pdf\)](#)

Significance:  Mar 24, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

NCV of 10 CFR Part 50, Appendix B, Criterion VI, for the failure to distribute temporary procedure changes to procedure sets in emergency response facilities

The inspectors identified two issues that were treated as one Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion VI, "Document Control." First, emergency and abnormal procedures in two emergency response facilities were not included as part of the temporary change distribution process. Second, no controls were in place to ensure that the scope of distribution of temporary procedure changes was appropriate.

The finding was of very low risk significance because the licensee distributed the documents to the facilities prior to any facility activation and the need to use the procedures.

Based upon the results of these inspections, we have concluded that the Red inspection finding, which involved the potential common mode failure of the AFW pumps due to inadequate operator response to a loss of instrument air (IA), will not be treated as an old design issue. As detailed in Section 6.06.a of Manual Chapter 0305, there are four criteria that must be met for the NRC to classify a problem as an old design issue and thus allow the NRC to not consider the finding in its assessment of Point Beach's overall performance.

The inspections identified that the criterion pertaining to corrective action was not met in that the implementation of corrective action associated with your evaluation of the AFW/IA issue did not prevent recurrence of another, separate potential common mode failure of the AFW pumps. The failure to implement thorough and complete corrective actions became apparent during our review of the October 2002 AFW recirculation line orifice plugging issue and the identification of other problems related to AFW design. These problems included the use of a nonsafety-related power supply for relays associated with the proper operation of the AFW recirculation line air-operated flow control valves and the single electrical bus dependencies of three of the four recirculation line air-operated flow control valves and three of the four service water supply motor-operated valves.

Because the AFW/IA Red finding did not meet the criteria for consideration as an old design issue, Point Beach is in the Multiple/Repetitive Degraded Cornerstone Column of the Action Matrix of Manual Chapter 0305.

Inspection Report# : [2002015\(pdf\)](#)

Significance:  Mar 24, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

NCV of 10 CFR Part 50, Appendix B, Criterion V, for inadequate procedure for calibration of auxiliary feedwater flow meter

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for a procedure which directed the use of a flow instrument for the turbine-driven AFW pump recirculation line in a range for which it was not calibrated.

The finding was of very low risk significance because follow-up calibration indicated that the instrument was reliable in the range in which it was to be used, and the inspectors concluded that it could have been used to accurately determine the AFW flow.

Inspection Report# : [2002015\(pdf\)](#)

Significance:  Mar 24, 2003

Identified By: NRC

Item Type: FIN Finding

Apparent violation of 10 CFR Part 50, Appendix B, Criterion III, for the failure to establish the appropriate design control measures for the installation of orifices to the AFW recirculation lines

An apparent violation was identified, in part, through a self-revealing event when decreased auxiliary feedwater pump recirculation flow was noted during post-maintenance testing. Subsequent licensee and NRC review of the event determined that the licensee had installed incorrectly designed orifices in each of the pump recirculation lines. The orifices, due to small clearances, were susceptible to plugging. The primary causes of this finding were inadequacies in the licensee's design process and the licensee's implementation of the process, including the identification of system design requirements and the development of supporting safety evaluations.

The issue has been preliminarily determined to have high safety significance (Red). Following installation of the inadequately designed orifices, the entire auxiliary feedwater system was susceptible to a common mode failure during operations using service water. Failure of auxiliary feedwater during several initiating events could lead to core damage. The installation of the incorrectly designed orifices in the recirculation lines is an apparent violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

On December 11, 2003, the final significance determination letter was issued for this finding. It was determined that this is a RED finding for Unit 2 and a YELLOW finding for Unit 1. For tracking purposes, identical findings were opened for Unit 1 (designated as YELLOW) and Unit 2 (designated as RED).

Inspection Report# : [2002015\(pdf\)](#)

Significance: N/A Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

The failure to identify the root cause and implement corrective actions for the AFW/IA issue, a significant condition adverse to quality, so as to prevent recurrence.

A violation was identified for the licensee's failure to implement adequate corrective actions to effectively address a previous Red finding and preclude recurrence (Inspection Report 50-266/01-17; 50-301/01-17). Specifically, the licensee failed to identify potential common mode failures that existed involving power supplies to the recirculation line air-operated valve and other system components. In addition, the licensee's corrective actions for the potential common mode failure associated with a loss of instrument air did not preclude repetition. Specifically, the licensee's corrective actions, to upgrade the safety function of the air-operated recirculation valve, failed to ensure that successful operation of the recirculation line air-operated valve was dependent only on safety-related support systems. Following the corrective actions, successful operation of the valve was still dependent upon nonsafety-related power to an interposing relay. Additionally, the corrective actions failed to discover a single failure mechanism involving a system orifice modification.

The issue was more than minor because the failure to implement appropriate corrective actions resulted in the auxiliary feedwater system continuing to rely on nonsafety-related support systems and to be susceptible to a single event causing a total system failure. The failure of nonsafety-related support systems and single event failures are an expected condition during several design basis accidents and should not cause a safety system to fail. The failure of the licensee to implement adequate corrective actions is a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action."

This violation is associated with a previously identified RED finding (IR 50-266;50-30/01-17).

Inspection Report# : [2002015\(pdf\)](#)

Significance:  Feb 28, 2002

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002.

Inspection Report 50-266/02-15; 50-301/02-15, issued April 2, 2003, documented the NRC decision that this finding is not an Old Design Issue.

Inspection Report# : [2001017\(pdf\)](#)

Inspection Report# : [2003003\(pdf\)](#)

Barrier Integrity

Significance:  Dec 28, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Pressurizer Safety Valve Failed to Lift at Test Pressure

The inspectors identified a Non-Cited Violation of Technical Specification 3.4.10 for the operation of Unit 2 from December 2000 to April 2002 with one inoperable pressurizer safety valve. The primary cause of this finding was related to the cross-cutting area of human performance, in that, inattention to the job-at-hand resulted in a vendor reassembling the valve such that it would not have lifted at the required setpoint.

The inspectors determined that the issue was more than minor because it affected the functionality of the reactor coolant system pressure boundary, a physical barrier designed to protect the public from radionuclide releases caused by accidents or events. However, the finding was of very low risk significance since the change in core damage frequency as a result of having operated with the inoperable safety valve was determined to be less than 1E-6/year.

Inspection Report# : [2002013\(pdf\)](#)

Emergency Preparedness

Significance: N/A Apr 15, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Decreased an Emergency Plan Commitment Without Prior NRC Approval

In October 1998, the licensee decreased its Emergency Plan's effectiveness without prior NRC approval due to an inadequate 10 CFR 50.54(q) review of six Emergency Response Organization (ERO) positions, which the licensee re-categorized from being 30 minute response positions to be 60 minute response positions. These six positions were re-established as 30 minute response positions in late January 2003. This Severity Level IV violation is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2002014\(pdf\)](#)



Significance: G Mar 31, 2003

Identified By: NRC

Item Type: FIN Finding

Emergency Notification System Power Failure

The inspectors identified one finding of very low risk significance for not having adequate configuration control and not providing sufficient drawings and instructions to maintenance and operations personnel during an emergency notification telephone system battery charger failure and subsequent replacement activities. The primary cause of this finding was related to the cross-cutting area of human performance in that a lack of understanding of the basic system configuration and the absence of associated drawings and operating instructions resulted in unnecessary periods of system unavailability.

The inspectors determined that the issue was more than minor because: 1) it affected the emergency preparedness cornerstone equipment and communications system attribute, and 2) if left uncorrected, would become a more significant safety concern if emergency response facility communication system modifications were made without the licensee's knowledge such that a reduction in emergency planning effectiveness occurred. Based on the answers to the Inspection Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process," screening questions, the inspectors determined that the issue was of very low safety significance. No violation of regulatory requirements occurred

Inspection Report# : [2003002\(pdf\)](#)

Occupational Radiation Safety



Significance: G Jun 30, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Need for a Unit 2 Containment Cooling Fan Discharge Damper Temporary Modification Not Identified in a Timely Manner

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for not taking appropriate and timely corrective actions to fully assess and correct degraded conditions associated with the safety-related Unit 2 containment cooling fan backdraft damper, 2W-1D2-A, during thermal performance testing activities on March 20, 2003. The primary cause of this finding was related to the cross-cutting area of human performance. Despite the involvement of the test coordinator, control room operating supervisor, and system engineer,

incomplete communications and coordination resulted in damper parts on the cooling fan plenum floor not being fully identified as components affecting operation of the safety-related damper. The condition adverse to quality was identified 13 days later when, on April 2, 2003, a mechanic passing through a radiologically controlled machine shop, identified the damper counterweight amongst other controlled material.

The finding was more than minor because: 1) it affected the reactor safety barrier integrity cornerstone objective of maintaining the functionality of primary containment, in that the reliability and availability of the Unit 2, 'D' containment cooling fan, a risk significant large-early-release component, was affected, and 2) if left uncorrected, would become a more significant safety concern if components relied upon to perform safety-related functions were returned to service prior to fully assessing and correcting degraded conditions. The finding was determined to be of very low risk significance since the degraded backdraft damper did not represent a degradation of the radiological barrier function of the control room, auxiliary building, or spent fuel pool; did not represent degradation of the barrier function of the control room against smoke or a toxic atmosphere; and did not represent an actual open pathway in the physical integrity of reactor containment or an actual reduction of the atmospheric pressure control function of the reactor containment.

Inspection Report# : [2003003\(pdf\)](#)

Public Radiation Safety

Physical Protection

Miscellaneous

Last modified : December 16, 2003

Point Beach 2

4Q/2003 Plant Inspection Findings

Initiating Events

Significance:  Dec 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate corrective actions for control of transient combustibles

The inspectors identified a Non-Cited Violation involving a finding of very low safety significance concerning the licensee's failure to take effective corrective actions to address the control of transient combustibles. Specifically, the licensee failed to correctly determine the cause (i.e., transient combustibles) of exceeding an NRC Safety Evaluation Report fire loading value for a fire zone. As a result of ineffective corrective actions, the inspectors identified additional instances in which transient combustibles were not appropriately evaluated as required. The primary cause of this finding was related to the cross-cutting area of problem identification and resolution. Despite the escalation of fire loading issues by the licensee's quality assurance organization in October 2002, combustible materials were reintroduced into the same fire zone without prior evaluation by November 2003.

This finding was more than minor because the finding, if uncorrected, could become a more significant safety concern and affect the Initiating Events cornerstone by increasing the likelihood or severity of fire. The finding was of very low safety significance because no fire protection features were affected and no instances were observed where the fire loading could cause either a fire barrier or an installed suppression system to be overwhelmed. This issue was a violation of a license condition which, by reference, invoked the licensee's Fire Protection Evaluation Report (FPER), which required conditions adverse to fire protection, such as uncontrolled combustible material, be promptly identified, reported, and corrected. The FPER also required that in the case of significant or repetitive conditions adverse to fire protection, the cause of the conditions is to be determined and analyzed and prompt corrective actions taken to preclude recurrence.

Inspection Report# : [2003009\(pdf\)](#)

Significance: SL-IV Dec 22, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform an Adequate Safety Evaluation for Changes to the Plant as Described in the USAR

Description

On October 16, 2001, the licensee completed Safety Evaluation (SE) 2001-0057. This safety evaluation deleted Technical Requirements Manual (TRM) Surveillance Requirement TSR 3.5.1.3, which required that the licensee verify, every 92 days, that the "charging pumps develop required flow rate, as specified by the Inservice Testing [IST] Program." Because the TRM is part of the plant USAR, the performance of a safety evaluation was required.

In the safety evaluation, the licensee justified the deletion of the requirement by stating, "Based on the fact that the PBNP Charging Pumps are not credited with an active safety function that would require IST Program testing, the Charging Pump IST surveillance requirement need not be carried over to the TRM." The reasoning for the change was entirely based upon the charging pumps having no safety function. While this appeared to be adequate justification to delete the IST requirement for the pumps, it did not justify the deletion of the TRM Surveillance Requirement. As stated in the PBNP Bases for TRM TLCO 3.5.1, the function of the charging pumps in support of the Chemical and

Volume Control System (CVCS) is described as follows, "The amount of boric acid injection must be sufficient to compensate for the addition of positive reactivity from the decay of xenon after a reactor trip from full power in order to maintain the required shutdown margin. This can be accomplished through the operation of one charging pump taking suction from the RWST." TSR 3.5.1.3 measured the flow rate to ensure that the charging pumps could support this function. When TSR 3.5.1.3 was deleted, this function was not evaluated in the safety evaluation. Consequently, the discussion, as presented in SE 2001-0057, only evaluated the removal of the IST requirements for the charging pumps, but did not evaluate the effects of removing the TRM Surveillance Requirement.

The inspector determined that this was a violation of 10 CFR 50.59 in that the licensee did not provide bases that the deletion of TSR 3.5.1.3 was acceptable without a license amendment. However, even though TSR 3.5.1.3 had been deleted, the licensee had still been performing a quarterly flow rate test of the charging pumps for the purpose of testing the charging pump discharge check valves. The inspectors determined that the flow rate measured in this quarterly test was sufficient to meet the requirements in TSR 3.5.1.3.

Analysis

Because violations of 10 CFR 50.59 are considered to be violations that potentially impede or impact the regulatory process, they are dispositioned using the traditional enforcement process instead of the SDP. In this case, the licensee's failure to perform an adequate safety evaluation in accordance with 10 CFR 50.59 resulted in a TRM Surveillance Requirement, TSR 3.5.1.3, being removed inappropriately.

This finding is more than minor because if left uncorrected, the finding would become a more significant safety concern. However, based upon the inspector's review, it was determined that the licensee's failure to provide the required basis for the 50.59 safety evaluation was an issue of very low safety significance. This was based upon the inspector determining that the measured quarterly charging pump flow rate for the discharge check valves test was sufficient to meet the requirements of the deleted TRM Surveillance Requirement. Therefore, since this issue was determined to be of very low safety significance, this finding was considered to be a Green finding.

Enforcement

10 CFR 50.59(d)(1) states, in part, that the licensee shall maintain records of changes in the facility, of changes in procedures, and of tests and experiments. These records must include a written evaluation which provides the bases for the determination that the change, test, or experiment does not require a license amendment.

Contrary to the above, in their safety evaluation, SE 2001-0057, the licensee failed to provide a basis for the determination that the deletion of the TRM Surveillance Requirement, part of the plant's USAR, was acceptable without a license amendment. The results of this violation were determined to be of very low safety significance; therefore, this violation of the requirements in 10 CFR 50.59 was classified as a Severity Level IV Violation. However, because this non-willful violation was non-repetitive, and was captured in the licensee's corrective action program (CAP052416), it is considered a Non-Cited Violation (NCV 50-266, 50-301/03-10-01 (DRS)) consistent with VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2003010\(pdf\)](#)



Significance: Sep 30, 2003

Identified By: NRC

Item Type: FIN Finding

Unit 2 SI During Start-up

A finding of very low safety significance was self-revealed when Unit 2 operators failed to identify that the main feedwater regulating valves (MFRVs) were in the automatic mode with a signal to open when the reactor trip breakers

were closed during a reactor startup. The resultant flow of lower temperature water into the steam generators reduced reactor coolant system (RCS) temperatures causing pressurizer level to decrease to the point that operators initiated a manual safety injection (SI) and reactor trip signal. The primary cause of this finding was related to the cross-cutting area of human performance. Despite at least four licensed reactor operators having discussed the abnormality of leaving the MFRVs in the automatic mode with senior reactor operators prior to the reactor startup attempt, no changes were made. In addition, the entire operations crew on the evening of July 11, 2003, failed to recognize the expected system responses when closing the reactor trip breakers.

The inspectors determined that the finding was more than minor because it: (1) involved the configuration control and human performance attributes of the Initiating Events cornerstone; and (2) affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown operations. The finding was of very low safety significance because it did not contribute to the likelihood of a primary or secondary system loss-of-coolant accident (LOCA), did not contribute to both the likelihood of a reactor trip and mitigating equipment unavailability, and did not increase the likelihood of a fire or flooding event. No violation of NRC requirements occurred.

Inspection Report# : [2003004\(pdf\)](#)

Mitigating Systems

Significance:  Dec 31, 2003

Identified By: NRC

Item Type: FIN Finding

Inadequate risk assessment associated with removing RHR pumps from the shutdown cooling mode of operation

The finding was considered more than minor because: (1) failure to recognize the increased risk condition resulted in compensatory risk management actions to protect the remaining reactor decay heat removal paths not being taken, actions intended to prevent entry into an unplanned orange or red risk condition; and (2) if left uncorrected, it would become a more safety significant concern, if elevated reactor decay heat removal risk categories were entered without the required risk management actions in place and subsequent heat removal challenges were to occur. The finding was of very low significance because it was not a design or qualification deficiency, did not represent an actual loss of the safety function, and did not involve internal or external initiating events. The finding was not a violation of regulatory requirements.

Inspection Report# : [2003009\(pdf\)](#)

Significance:  Dec 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Operator error results in starting a residual heat removal pump with the suction valve shut

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed when inadequate procedure use resulted in starting a Unit 2 RHR pump with the suction valve shut. The primary cause of this finding was related to the cross-cutting area of human performance. Perceived time pressure, concurrent watch turnovers, lack of specific supervisory briefings, operator fatigue, and ineffective peer and self-checking resulted in a licensed senior reactor operator (SRO) and reactor operator not recognizing that the suction path to the 'B' RHR pump was isolated prior to starting the pump.

This finding was considered more than minor because it: 1) affected the mitigating systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events, and 2) involved the human performance attribute of the mitigating systems cornerstone. The finding was determined to be of very low risk significance since the inadequate procedure place keeping did not result in a design or qualification deficiency, an actual loss of safety function, or involve internal or external initiating events.

Inspection Report# : [2003009\(pdf\)](#)

G

Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Design control violation for the failure to assure that the regulatory requirements and the design basis were accurately maintained for the battery chargers

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," because Technical Specification Surveillance Requirement 3.8.4.6 for testing the safety-related battery chargers was non-conservative in relation to the design basis calculation for battery charger sizing.

This finding is greater than minor because it affected the mitigating systems cornerstone objective. This finding is of very low safety significance because it was a design deficiency that did not result in the loss of function.

Inspection Report# : [2003007\(pdf\)](#)

G

Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Design control violation for the failure to revise voltage drop calculations

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," because the licensee failed to maintain the 125-volt direct current (VDC) voltage drop calculations accurate and up-to-date.

This finding is greater than minor because it affected the mitigating systems cornerstone objective. This finding is of very low safety significance because it was a design deficiency that did not result in the loss of function.

Inspection Report# : [2003007\(pdf\)](#)

G

Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective action violation for untimely correction of equipment not environmentally qualified

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action." Specifically, the licensee failed to implement timely corrective action (for over 5 years) for safety-related electrical equipment in the primary auxiliary building (PAB) that was not environmentally qualified, a condition adverse to quality.

This finding is greater than minor because if left uncorrected, the finding would become a more significant safety concern and have adverse effects on the capability to prevent or mitigate the consequences of accidents. The finding is of very low safety significance because it was a design deficiency that did not result in the loss of function.

Inspection Report# : [2003007\(pdf\)](#)

 **Significance:** Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.49 violation for equipment not environmentally qualified

The inspectors identified a Non-Cited Violation of 10 CFR 50.49(f). Specifically, the licensee identified equipment important to safety located in the primary auxiliary building that would be susceptible to a harsh environment during a postulated high-energy line break but failed to environmentally qualify that equipment.

This finding is greater than minor because if left uncorrected, the finding would become a more significant safety concern and have adverse effects on the capability to prevent or mitigate the consequences of accidents. The finding is of very low safety significance because it was a design deficiency that did not result in the loss of function.

Inspection Report# : [2003007\(pdf\)](#)

 **Significance:** Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Test control violation for not including several manual CCW valves in the inservice testing program

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," because the licensee failed to include in the inservice testing program manual component cooling water (CCW) valves that were required to perform a safety function.

This finding is greater than minor because it could have affected the mitigating cornerstone objective of ensuring the availability of the CCW or residual heat removal (RHR) systems when required to respond to the initiating event. The finding is of very low safety significance because it did not represent an actual loss of safety function.

Inspection Report# : [2003007\(pdf\)](#)

 **Significance:** Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate procedure violation for inaccurate setpoints in EOPs

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." Specifically, the licensee failed to include appropriate quantitative setpoint values for the minimum low head safety injection "A" train flow in plant emergency operating procedures (EOPs).

This finding is greater than minor because it could have affected the mitigating cornerstone objective of ensuring the availability of the low head safety injection system when required to respond to the initiating event. The finding is of very low safety significance because it did not represent an actual loss of safety function.

Inspection Report# : [2003007\(pdf\)](#)

 **Significance:** Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Appendix R violation for failure to ensure air would be available to charging pumps

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix R, Section III.L.1.c. Specifically, the licensee failed to ensure, without the need for "hot standby repairs," adequate control air to the speed controllers for the

charging pumps during a postulated fire requiring an alternative shutdown method.

This finding is greater than minor because the finding would become a more significant safety concern if left uncorrected. The finding is of very low safety significance because it is likely that the licensee would have been successful in completing the repairs and allowing the plant to be maintained in hot standby until cold shutdown could be achieved.

Inspection Report# : [2003007\(pdf\)](#)



Significance: Sep 30, 2003

Identified By: NRC

Item Type: FIN Finding

Operating Test Grading Disagreement

The inspectors identified a finding of very low risk significance concerning a grading discrepancy between the facility licensee and the NRC inspectors during the NRC licensed operator requalification annual operating test. The grading disagreement involved a pass-fail decision on one operating crew and two licensed operators' performance during the simulator scenario portion of the operating test. Specifically, the crew inadequately diagnosed and mitigated a component cooling water leak event which later caused an unexpected manual reactor trip. In addition, the senior operator, while implementing the Emergency Plan, failed to make proper and accurate off-site notifications. The licensee failed to adequately assess the pass/fail evaluation for the poor performance by the crew and operators that would have potentially resulted in an operational test failure.

This finding was considered more than minor because improper grading of a crew or an individual was considered a risk important issue in that operators or crews with unsatisfactory performance could be placed on shift without proper remediation. Furthermore, there was the realistic potential of providing negative training based on improper assessment of operator performance. Specifically, poor performance on the simulator could potentially lead to improper operator actions on the actual plant. The finding was of very low safety significance because the poor performance and incorrect actions were on the simulator and not on the actual plant. Furthermore, no actual plant emergency occurred and there was no actual impact on equipment or personnel safety. No violation of regulatory requirements occurred.

Inspection Report# : [2003004\(pdf\)](#)



Significance: Sep 30, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Required Performance Testing Per 10 CFR 55.46

The inspectors identified a Non-Cited Violation (NCV) of 10 CFR 55.46(d)(1), "Continued Assurance of Simulator Fidelity." The inspectors identified one example of failure to meet the performance requirements in maintaining simulator fidelity throughout the life of the simulation facility. Specifically, the facility licensee failed to conduct one particular performance test throughout the life of the simulator (since 1991) in accordance with the committed testing requirements of ANSI/ANS-3.5-1985, "Nuclear Power Plant Simulators for Use in Operator Training."

This finding was considered more than minor because of the realistic potential of providing negative training based on simulator deficiencies compared to the actual plant existed. Specifically, inadequate testing of the simulator to assure that the simulator appropriately replicated the actual plant could potentially have affected operator actions on the actual plant. The finding was of very low safety significance because the discrepancy was on the simulator and the actual plant functioned properly. Furthermore, no actual plant emergency occurred and there was no actual impact on equipment or personnel safety.

Inspection Report# : [2003004\(pdf\)](#)

Significance:  Jun 30, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement Risk Management Actions for Components Made Unavailable by Pre-Planned Work Activities

The inspectors identified a Non-Cited Violation of 10 CFR 50.65(a)(4) for failure to implement required risk management actions during calibration of volume control tank level transmitters during September 2002 and January 2003. The primary cause of this finding was related to the cross-cutting area of human performance in that probabilistic risk assessment, production planning, and on-shift personnel had not utilized the full capabilities of the risk assessment tool to recognize the unavailability of components associated with pre-planned work activities.

The finding is greater than minor because, if left uncorrected, it would become a more significant safety concern if risk assessments that had not considered the impact of equipment and components rendered unavailable by pre-planned activities resulted in high risk levels without compensatory risk management analyses in place. The finding is of very low significance because it was not a design or qualification deficiency, did not represent an actual loss of the safety function, and did not involve internal or external initiating events.

Inspection Report# : [2003003\(pdf\)](#)

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Emergency Diesel Generator Safety-Related Protective Relay Calibration Procedure Inadequacies

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requirements for inadequate emergency diesel generator (EDG) safety-related protective relay calibration procedures which contained quantitative acceptance criteria limits that did not correspond to vendor recommended values. The primary cause of this finding was related to the cross-cutting area of human performance. Despite multiple opportunities for procedure writers, technical reviewers, relay technicians, maintenance work planners, electrical maintenance first-line supervisors, and operations personnel to have identified these errors, each of the four procedures used to calibrate the EDG safety-related protective relays were found to contain similar quantitative acceptance criteria errors.

This finding was more than minor because it: 1) affected the mitigating systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events, and 2) if left uncorrected, would become a more significant safety concern in subsequent years if out-of-specification EDG safety-related protective relay settings affecting equipment operability and electrical distribution system coordination were left in service and not corrected. The finding was determined to be of very low risk significance since the inadequate procedures did not result in a design or qualification deficiency, an actual loss of the safety function, or involve internal or external initiating events.

Inspection Report# : [2003002\(pdf\)](#)

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: FIN Finding

G-05 Gas Turbine Generator Return-To-Service Prior to Completion of Troubleshooting and Maintenance Activities

The inspectors identified a finding of very low risk significance finding concerning the return to service of the G-05 gas turbine (GT) generator prior to completion of troubleshooting efforts involving starting diesel oil samples and certain

maintenance activities. The primary cause of this finding was related to the cross-cutting area of human performance in that lack of interdepartmental communications and coordination caused the GT to be inappropriately returned to service on March 3, 2003, despite starting diesel analyses that indicated advanced oil degradation and the onset of bearing damage and no return-to-service testing requirements having been defined in the maintenance department troubleshooting plan.

The inspectors determined that the issue was more than minor because it affected the availability, reliability, and capability of the G-05 GT, a mitigating system. The finding was of very low safety significance since the inappropriate return-to-service did not result in a design or qualification deficiency, an actual loss of the safety function, or involve internal or external initiating events. No violation of NRC requirements occurred.

Inspection Report# : [2003002\(pdf\)](#)

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Reoccurring Facade Freeze Protection System Deficiencies

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified through a self-revealing event on February 11, 2003, when one of the main control board indications associated with Unit 1 'B' main steam line pressure began reading higher than the other two. The higher pressure indicated the formation of an ice plug associated with pressure transmitter IPT-483, a transmitter providing input to the engineering safeguards system. The primary cause of this finding was related to the cross-cutting area of human performance in that lack of facade freeze protection system coordination and training in the areas of lagging deficiencies and facade freeze system operations resulted in the removal of one of the three main steam line pressure inputs to the engineering safeguards system, a system relied upon to mitigate the consequences of a design basis accident.

The inspectors determined that the facade freeze protection issues were more than minor because: 1) they had affected the availability, reliability, and capability of an input to the engineering safeguards system, a system relied upon to mitigate the consequences of a design basis accident; and 2) if left uncorrected, they would become a more significant concern in subsequent years if freezing of sensing lines resulted in the inability to mitigate the consequences of an accident. The finding was determined to be of very low risk significance since the facade freeze protection issues did not result in a design or qualification deficiency, an actual loss of the safety function, or meet any of the internal or external event screening criteria.

Inspection Report# : [2003002\(pdf\)](#)

Significance:  Mar 24, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

NCV of 10 CFR Part 50, Appendix B, Criterion VI, for the failure to distribute temporary procedure changes to procedure sets in emergency response facilities

The inspectors identified two issues that were treated as one Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion VI, "Document Control." First, emergency and abnormal procedures in two emergency response facilities were not included as part of the temporary change distribution process. Second, no controls were in place to ensure that the scope of distribution of temporary procedure changes was appropriate.

The finding was of very low risk significance because the licensee distributed the documents to the facilities prior to any facility activation and the need to use the procedures.

Based upon the results of these inspections, we have concluded that the Red inspection finding, which involved the

potential common mode failure of the AFW pumps due to inadequate operator response to a loss of instrument air (IA), will not be treated as an old design issue. As detailed in Section 6.06.a of Manual Chapter 0305, there are four criteria that must be met for the NRC to classify a problem as an old design issue and thus allow the NRC to not consider the finding in its assessment of Point Beach's overall performance.

The inspections identified that the criterion pertaining to corrective action was not met in that the implementation of corrective action associated with your evaluation of the AFW/IA issue did not prevent recurrence of another, separate potential common mode failure of the AFW pumps. The failure to implement thorough and complete corrective actions became apparent during our review of the October 2002 AFW recirculation line orifice plugging issue and the identification of other problems related to AFW design. These problems included the use of a nonsafety-related power supply for relays associated with the proper operation of the AFW recirculation line air-operated flow control valves and the single electrical bus dependencies of three of the four recirculation line air-operated flow control valves and three of the four service water supply motor-operated valves.

Because the AFW/IA Red finding did not meet the criteria for consideration as an old design issue, Point Beach is in the Multiple/Repetitive Degraded Cornerstone Column of the Action Matrix of Manual Chapter 0305.

Inspection Report# : [2002015\(pdf\)](#)



Significance: Mar 24, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

NCV of 10 CFR Part 50, Appendix B, Criterion V, for inadequate procedure for calibration of auxiliary feedwater flow meter

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for a procedure which directed the use of a flow instrument for the turbine-driven AFW pump recirculation line in a range for which it was not calibrated.

The finding was of very low risk significance because follow-up calibration indicated that the instrument was reliable in the range in which it was to be used, and the inspectors concluded that it could have been used to accurately determine the AFW flow.

Inspection Report# : [2002015\(pdf\)](#)



Significance: Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

Apparent violation of 10 CFR Part 50, Appendix B, Criterion III, for the failure to establish the appropriate design control measures for the installation of orifices to the AFW recirculation lines

An apparent violation was identified, in part, through a self-revealing event when decreased auxiliary feedwater pump recirculation flow was noted during post-maintenance testing. Subsequent licensee and NRC review of the event determined that the licensee had installed incorrectly designed orifices in each of the pump recirculation lines. The orifices, due to small clearances, were susceptible to plugging. The primary causes of this finding were inadequacies in the licensee's design process and the licensee's implementation of the process, including the identification of system design requirements and the development of supporting safety evaluations.

The issue has been preliminarily determined to have high safety significance (Red). Following installation of the inadequately designed orifices, the entire auxiliary feedwater system was susceptible to a common mode failure during operations using service water. Failure of auxiliary feedwater during several initiating events could lead to core damage. The installation of the incorrectly designed orifices in the recirculation lines is an apparent violation of 10

CFR Part 50, Appendix B, Criterion III, "Design Control."

On December 11, 2003, the final significance determination letter was issued for this finding. It was determined that this is a RED finding for Unit 2 and a YELLOW finding for Unit 1. For tracking purposes, identical findings were opened for Unit 1 (designated as YELLOW) and Unit 2 (designated as RED).

Inspection Report# : [2002015\(pdf\)](#)

Significance: N/A Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation


The failure to identify the root cause and implement corrective actions for the AFW/IA issue, a significant condition adverse to quality, so as to prevent recurrence.

A violation was identified for the licensee's failure to implement adequate corrective actions to effectively address a previous Red finding and preclude recurrence (Inspection Report 50-266/01-17; 50-301/01-17). Specifically, the licensee failed to identify potential common mode failures that existed involving power supplies to the recirculation line air-operated valve and other system components. In addition, the licensee's corrective actions for the potential common mode failure associated with a loss of instrument air did not preclude repetition. Specifically, the licensee's corrective actions, to upgrade the safety function of the air-operated recirculation valve, failed to ensure that successful operation of the recirculation line air-operated valve was dependent only on safety-related support systems. Following the corrective actions, successful operation of the valve was still dependent upon nonsafety-related power to an interposing relay. Additionally, the corrective actions failed to discover a single failure mechanism involving a system orifice modification.

The issue was more than minor because the failure to implement appropriate corrective actions resulted in the auxiliary feedwater system continuing to rely on nonsafety-related support systems and to be susceptible to a single event causing a total system failure. The failure of nonsafety-related support systems and single event failures are an expected condition during several design basis accidents and should not cause a safety system to fail. The failure of the licensee to implement adequate corrective actions is a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action."

This violation is associated with a previously identified RED finding (IR 50-266;50-30/01-17).

Inspection Report# : [2002015\(pdf\)](#)

Significance:  Feb 28, 2002

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI.

This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating

event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002.

Inspection Report 50-266/02-15; 50-301/02-15, issued April 2, 2003, documented the NRC decision that this finding is not an Old Design Issue.

Inspection Report# : [2001017\(pdf\)](#)

Inspection Report# : [2003003\(pdf\)](#)

Barrier Integrity



Significance: Jun 30, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Need for a Unit 2 Containment Cooling Fan Discharge Damper Temporary Modification Not Identified in a Timely Manner

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for not taking appropriate and timely corrective actions to fully assess and correct degraded conditions associated with the safety-related Unit 2 containment cooling fan backdraft damper, 2W-1D2-A, during thermal performance testing activities on March 20, 2003. The primary cause of this finding was related to the cross-cutting area of human performance. Despite the involvement of the test coordinator, control room operating supervisor, and system engineer, incomplete communications and coordination resulted in damper parts on the cooling fan plenum floor not being fully identified as components affecting operation of the safety-related damper. The condition adverse to quality was identified 13 days later when, on April 2, 2003, a mechanic passing through a radiologically controlled machine shop, identified the damper counterweight amongst other controlled material.

The finding was more than minor because: 1) it affected the reactor safety barrier integrity cornerstone objective of maintaining the functionality of primary containment, in that the reliability and availability of the Unit 2, 'D' containment cooling fan, a risk significant large-early-release component, was affected, and 2) if left uncorrected, would become a more significant safety concern if components relied upon to perform safety-related functions were returned to service prior to fully assessing and correcting degraded conditions. The finding was determined to be of very low risk significance since the degraded backdraft damper did not represent a degradation of the radiological barrier function of the control room, auxiliary building, or spent fuel pool; did not represent degradation of the barrier function of the control room against smoke or a toxic atmosphere; and did not represent an actual open pathway in the physical integrity of reactor containment or an actual reduction of the atmospheric pressure control function of the reactor containment.

Inspection Report# : [2003003\(pdf\)](#)

Emergency Preparedness



Significance: Dec 31, 2003

Identified By: NRC

Item Type: FIN Finding

Protective action recommendation training for Licensed Reactor Operator using an outdated procedure

The inspectors identified a finding of very low safety significance when they observed that the licensee failed to use the current revision to safety-related Emergency Plan Implementing Procedure (EPIP) 1.3, "Tools for Dose Assessment," during a licensed operator requalification training class. This was the final scheduled class for this topic and the only one that was taught after the procedure had been revised on November 26, 2003. In addition, the inspectors noted that the training failed to include sheltering as a protective action recommendation option. This occurred despite the procedure having been changed the week before specifically to allow consideration of the sheltering option. The primary cause of this finding was related to the cross-cutting area of human performance in two respects. First, the decision not to train on the sheltering option represented a missed opportunity to train personnel on the full range of available protective action recommendations. Second, members of Operations management and Emergency Planning supervision failed to stop the training despite having been informed at the beginning of the class that the most current revision would not be used.

The finding was considered more than minor because it: (1) involved the emergency response organization readiness and response organization performance training attributes of the Reactor Safety/Emergency Preparedness cornerstone; and (2) if left uncorrected, it could lead to inadequate performance of protective action recommendations, actions intended to protect the health and safety of the public. The finding was not a violation of regulatory requirements.

Inspection Report# : [2003009\(pdf\)](#)



Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.54, 10 CFR 50.47 violation for failure to assign adequate emergency response organization staffing

The inspectors identified a Non-Cited Violation of emergency planning standard 10 CFR 50.47(b)(2) because the licensee failed to assign onshift responsibilities for reading facility seismic monitors, thereby affecting the ability to timely classify certain seismic emergency events.

This finding is greater than minor because it was associated with a cornerstone attribute and affected the emergency preparedness cornerstone objective to ensure the adequate protection of the public health and safety. This finding is of very low safety significance because it was a degradation in the emergency response organization (ERO) onshift staffing and did not represent a planning standard function failure.

Inspection Report# : [2003007\(pdf\)](#)

Significance: SL-IV Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.9 violation for failure to report in the third quarter of 2001 that the emergency response organization performance indicator crossed the significance threshold from green to white

The inspectors identified a Severity Level IV Non-Cited Violation of 10 CFR 50.9 because the licensee failed to provide complete and accurate information in the submittal of information for the emergency response organization (ERO) performance indicator (PI). Twenty-three onshift communicators should have been tracked and reported in the ERO PI, but were not. The licensee has subsequently submitted corrected PI data to the NRC.

This issue is greater than minor because it caused the PI to cross the Green-to-White threshold for the 3rd quarter of 2001. Because this issue affected the NRC's ability to perform its regulatory function, it was evaluated with the traditional enforcement process.

Inspection Report# : [2003007\(pdf\)](#)

 **Significance:** Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.54, 10 CFR 50.47 violation for the failure to develop and implement a training program for the emergency planning staff

The inspectors identified a Non-Cited Violation of emergency planning standard 10 CFR 50.47(b)(16) because the licensee failed to develop and implement an emergency planning staff training program to ensure that emergency planners were properly trained.

This finding is greater than minor because it was associated with a cornerstone attribute and affected the emergency preparedness cornerstone objective to ensure the adequate protection of the public health and safety. This finding is of very low safety significance because lack of a staff training program presented a potential degrading condition for the level of qualification and proficiency of the emergency preparedness staff, but did not represent a failure of the planning standard function.

Inspection Report# : [2003007\(pdf\)](#)

Significance: TBD Dec 16, 2003

Identified By: NRC

Item Type: AV Apparent Violation

10 CFR 50.54, 10 CFR 50.47 apparent violation for failure to maintain a standard scheme of emergency action levels

The inspectors identified an apparent violation of 10 CFR 50.54(q), associated with emergency planning standard 10 CFR 50.47(b)(4), which will be subject to the NRC traditional enforcement process not the revised Reactor Oversight Process. Specifically, the licensee failed to maintain a standard scheme of emergency action levels (EALs). Eight EALs were changed in 1998 and 1999. The changes decreased the effectiveness of the Emergency Plan in that emergency conditions that would have resulted in classifications at the General Emergency (GE), Alert, and Notification of Unusual Event (NOUE) levels would result in a lesser classification under the current EAL scheme. Approval of the NRC was not obtained prior to the changes being made. Since the identification of the issue by the inspectors, the licensee has revised the eight EALs to be equivalent with those approved by the NRC in 1984.

Inspection Report# : [2003007\(pdf\)](#)

 **Significance:** Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.54, 10 CFR 50.47 violation for failure to ensure that the facility seismic monitors could support NOUE declaration

The inspectors identified a Non-Cited Violation of emergency planning standard 10 CFR 50.47(b)(4) because the licensee failed to properly calibrate the facility seismic monitors to ensure they were capable of supporting implementation of a Notice of Unusual Event EAL.

This finding is greater than minor because it was associated with a cornerstone attribute and affected the emergency preparedness cornerstone objective to ensure the adequate protection of the public health and safety. This finding is of very low safety significance because a Notice of Unusual Event could still be declared based on ground shaking.

Inspection Report# : [2003007\(pdf\)](#)

Significance: N/A Apr 15, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Decreased an Emergency Plan Commitment Without Prior NRC Approval

In October 1998, the licensee decreased its Emergency Plan's effectiveness without prior NRC approval due to an inadequate 10 CFR 50.54(q) review of six Emergency Response Organization (ERO) positions, which the licensee re-categorized from being 30 minute response positions to be 60 minute response positions. These six positions were re-established as 30 minute response positions in late January 2003. This Severity Level IV violation is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2002014\(pdf\)](#)

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: FIN Finding

Emergency Notification System Power Failure

The inspectors identified one finding of very low risk significance for not having adequate configuration control and not providing sufficient drawings and instructions to maintenance and operations personnel during an emergency notification telephone system battery charger failure and subsequent replacement activities. The primary cause of this finding was related to the cross-cutting area of human performance in that a lack of understanding of the basic system configuration and the absence of associated drawings and operating instructions resulted in unnecessary periods of system unavailability.

The inspectors determined that the issue was more than minor because: 1) it affected the emergency preparedness cornerstone equipment and communications system attribute, and 2) if left uncorrected, would become a more significant safety concern if emergency response facility communication system modifications were made without the licensee's knowledge such that a reduction in emergency planning effectiveness occurred. Based on the answers to the Inspection Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process," screening questions, the inspectors determined that the issue was of very low safety significance. No violation of regulatory requirements occurred

Inspection Report# : [2003002\(pdf\)](#)

Occupational Radiation Safety

Significance:  Oct 09, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to control access to a Very High Radiation Area

Green. A finding of very low safety significance and an associated Non-Cited Violation (NCV) was identified through a self-revealing event, when the key for the Unit 2 Keyway (i.e. a posted Very High Radiation Area [VHRA], which had been established prior to withdrawing the thimbles) was improperly controlled, and thus the access to the keyway was improperly controlled for several hours. Despite adequate station procedures and training (i.e. of Radiation Protection personnel) for proper VHRA key control and requirements to post and guard VHRAs the gate was left unguarded for several hours.

Inspection Report# : [2003009\(pdf\)](#)

Public Radiation Safety

Significance:  Oct 11, 2003

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Failure to perform adequate surveys

Green. A finding of very low safety significance and an associated Non-Cited Violation (NCV) was identified through a self-revealing event, when a valve was shipped from Point Beach Nuclear Plant without being identified as radioactive material. An inadequate radiological survey of 2CV-203 was performed (i.e. to determine the concentrations or quantities of radioactive materials inside the valve). Licensed radioactive material was found by the vendor at their repair facility (i.e. inside the valve), prior to performing work on the valve. Despite adequate station procedures and training (i.e. of Radiation Protection personnel) for proper determination of materials being evaluated for release or control at the Radiologically Controlled Area boundary, the valve was inadequately surveyed and released for shipment to the vendor, as unrestricted material.

Inspection Report# : [2003009\(pdf\)](#)

Significance:  May 14, 2003

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Failure to Maintain Control of Licensed Radioactive Material in an Unrestricted Area and that was not in Storage

The licensee identified a self-revealing violation of 10 CFR 20.1802, involving the failure to maintain control and constant surveillance of licensed radioactive material in an unrestricted area (an instrument and calibration training laboratory) that was not in storage. The material was an unaccounted for, 1.0 microcurie strontium-90/yttrium-90 check source, installed in an area radiation monitor.

The finding was more than minor because it was associated with the "Program and Process" attribute of the Public Radiation Safety Cornerstone and affected the cornerstone objective of ensuring adequate protection of public health and safety from exposure to radioactive materials released into the public domain. This was a legacy issue, for which the apparent cause occurred prior to implementation of an effective radioactive material source control program in 1998. However, this finding was of very low safety significance in that public radiation exposure was not greater than 0.005 rem and the licensee did not have more than five radioactive material control occurrences (in the previous eight quarters). Thus, this finding will be documented as a Non-Cited Violation of 10 CFR 20.1802, for the licensee's failure to maintain control of licensed radioactive material in an unrestricted area that was not in storage.

Inspection Report# : [2003003\(pdf\)](#)

Physical Protection

Miscellaneous

Last modified : March 02, 2004

Point Beach 2

1Q/2004 Plant Inspection Findings

Initiating Events



Significance: G Dec 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate corrective actions for control of transient combustibles

The inspectors identified a Non-Cited Violation involving a finding of very low safety significance concerning the licensee's failure to take effective corrective actions to address the control of transient combustibles. Specifically, the licensee failed to correctly determine the cause (i.e., transient combustibles) of exceeding an NRC Safety Evaluation Report fire loading value for a fire zone. As a result of ineffective corrective actions, the inspectors identified additional instances in which transient combustibles were not appropriately evaluated as required. The primary cause of this finding was related to the cross-cutting area of problem identification and resolution. Despite the escalation of fire loading issues by the licensee's quality assurance organization in October 2002, combustible materials were reintroduced into the same fire zone without prior evaluation by November 2003.

This finding was more than minor because the finding, if uncorrected, could become a more significant safety concern and affect the Initiating Events cornerstone by increasing the likelihood or severity of fire. The finding was of very low safety significance because no fire protection features were affected and no instances were observed where the fire loading could cause either a fire barrier or an installed suppression system to be overwhelmed. This issue was a violation of a license condition which, by reference, invoked the licensee's Fire Protection Evaluation Report (FPER), which required conditions adverse to fire protection, such as uncontrolled combustible material, be promptly identified, reported, and corrected. The FPER also required that in the case of significant or repetitive conditions adverse to fire protection, the cause of the conditions is to be determined and analyzed and prompt corrective actions taken to preclude recurrence.

Inspection Report# : [2003009\(pdf\)](#)

Significance: SL-IV Dec 22, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform an Adequate Safety Evaluation for Changes to the Plant as Described in the USAR

Description

On October 16, 2001, the licensee completed Safety Evaluation (SE) 2001-0057. This safety evaluation deleted Technical Requirements Manual (TRM) Surveillance Requirement TSR 3.5.1.3, which required that the licensee verify, every 92 days, that the "charging pumps develop required flow rate, as specified by the Inservice Testing [IST] Program." Because the TRM is part of the plant USAR, the performance of a safety evaluation was required.

In the safety evaluation, the licensee justified the deletion of the requirement by stating, "Based on the fact that the PBNP Charging Pumps are not credited with an active safety function that would require IST Program testing, the Charging Pump IST surveillance requirement need not be carried over to the TRM." The reasoning for the change was entirely based upon the charging pumps having no safety function. While this appeared to be adequate justification to delete the IST requirement for the pumps, it did not justify the deletion of the TRM Surveillance Requirement. As stated in the PBNP Bases for TRM TLCO 3.5.1, the function of the charging pumps in support of the Chemical and Volume Control System (CVCS) is described as follows, "The amount of boric acid injection must be sufficient to compensate for the addition of positive reactivity from the decay of xenon after a reactor trip from full power in order to maintain the required shutdown margin. This can be accomplished through the operation of one charging pump taking suction from the RWST." TSR 3.5.1.3 measured the flow rate to ensure that the charging pumps could support this function. When TSR 3.5.1.3 was deleted, this function was not evaluated in the safety evaluation. Consequently, the discussion, as presented in SE 2001-0057, only evaluated the removal of the IST requirements for the charging pumps, but did not evaluate the effects of removing the TRM Surveillance Requirement.

The inspector determined that this was a violation of 10 CFR 50.59 in that the licensee did not provide bases that the deletion of TSR 3.5.1.3 was acceptable without a license amendment. However, even though TSR 3.5.1.3 had been deleted, the licensee had still been performing a quarterly flow rate test of the charging pumps for the purpose of testing the charging pump discharge check valves. The inspectors determined that the flow rate measured in this quarterly test was sufficient to meet the requirements in TSR 3.5.1.3.

Analysis

Because violations of 10 CFR 50.59 are considered to be violations that potentially impede or impact the regulatory process, they are dispositioned using the traditional enforcement process instead of the SDP. In this case, the licensee's failure to perform an adequate safety evaluation in accordance with 10 CFR 50.59 resulted in a TRM Surveillance Requirement, TSR 3.5.1.3, being removed inappropriately.

This finding is more than minor because if left uncorrected, the finding would become a more significant safety concern. However, based upon the inspector's review, it was determined that the licensee's failure to provide the required basis for the 50.59 safety evaluation was an issue of very low safety significance. This was based upon the inspector determining that the measured quarterly charging pump flow rate for the discharge check valves test was sufficient to meet the requirements of the deleted TRM Surveillance Requirement. Therefore, since this issue was determined to be of very low

safety significance, this finding was considered to be a Green finding.

Enforcement

10 CFR 50.59(d)(1) states, in part, that the licensee shall maintain records of changes in the facility, of changes in procedures, and of tests and experiments. These records must include a written evaluation which provides the bases for the determination that the change, test, or experiment does not require a license amendment.

Contrary to the above, in their safety evaluation, SE 2001-0057, the licensee failed to provide a basis for the determination that the deletion of the TRM Surveillance Requirement, part of the plant's USAR, was acceptable without a license amendment. The results of this violation were determined to be of very low safety significance; therefore, this violation of the requirements in 10 CFR 50.59 was classified as a Severity Level IV Violation. However, because this non-willful violation was non-repetitive, and was captured in the licensee's corrective action program (CAP052416), it is considered a Non-Cited Violation (NCV 50-266, 50-301/03-10-01 (DRS)) consistent with VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2003010\(pdf\)](#)

Significance:  Sep 30, 2003

Identified By: NRC

Item Type: FIN Finding

Unit 2 SI During Start-up

A finding of very low safety significance was self-revealed when Unit 2 operators failed to identify that the main feedwater regulating valves (MFRVs) were in the automatic mode with a signal to open when the reactor trip breakers were closed during a reactor startup. The resultant flow of lower temperature water into the steam generators reduced reactor coolant system (RCS) temperatures causing pressurizer level to decrease to the point that operators initiated a manual safety injection (SI) and reactor trip signal. The primary cause of this finding was related to the cross-cutting area of human performance. Despite at least four licensed reactor operators having discussed the abnormality of leaving the MFRVs in the automatic mode with senior reactor operators prior to the reactor startup attempt, no changes were made. In addition, the entire operations crew on the evening of July 11, 2003, failed to recognize the expected system responses when closing the reactor trip breakers.

The inspectors determined that the finding was more than minor because it: (1) involved the configuration control and human performance attributes of the Initiating Events cornerstone; and (2) affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown operations. The finding was of very low safety significance because it did not contribute to the likelihood of a primary or secondary system loss-of-coolant accident (LOCA), did not contribute to both the likelihood of a reactor trip and mitigating equipment unavailability, and did not increase the likelihood of a fire or flooding event. No violation of NRC requirements occurred.

Inspection Report# : [2003004\(pdf\)](#)

Mitigating Systems

Significance:  Mar 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Sprinkler Head Locations Not in Accordance with Fire Code

The inspectors identified an NCV of the license for the failure of the licensee to install sprinkler heads in accordance with the applicable fire code in the component cooling water (CCW) pump area. Specifically, the sprinkler heads were located a greater distance below the ceiling than permitted by code.

This finding was more than minor because it was associated with the protection against external factors (i.e., fire) attribute of the mitigating systems reactor safety cornerstone and affected the cornerstone objective in that a fire protection feature (i.e., an automatic suppression system) was adversely affected. The finding was of very low safety significance because manual fire fighting and auxiliary feedwater (AFW) could be credited. This issue is a violation of a license condition and the applicable fire code which requires that sprinkler heads be located near the ceiling.

Inspection Report# : [2004002\(pdf\)](#)

Significance:  Dec 31, 2003

Identified By: NRC

Item Type: FIN Finding

Inadequate risk assessment associated with removing RHR pumps from the shutdown cooling mode of operation

The finding was considered more than minor because: (1) failure to recognize the increased risk condition resulted in compensatory risk management actions to protect the remaining reactor decay heat removal paths not being taken, actions intended to prevent entry into an unplanned orange or red risk condition; and (2) if left uncorrected, it would become a more safety significant concern, if elevated reactor decay heat removal risk categories were entered without the required risk management actions in place and subsequent heat removal challenges were to occur. The finding was of very low significance because it was not a design or qualification deficiency, did not represent an actual loss of the safety function, and did not involve internal or

external initiating events. The finding was not a violation of regulatory requirements.

Inspection Report# : [2003009\(pdf\)](#)



Significance: Dec 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Operator error results in starting a residual heat removal pump with the suction valve shut

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed when inadequate procedure use resulted in starting a Unit 2 RHR pump with the suction valve shut. The primary cause of this finding was related to the cross-cutting area of human performance. Perceived time pressure, concurrent watch turnovers, lack of specific supervisory briefings, operator fatigue, and ineffective peer and self-checking resulted in a licensed senior reactor operator (SRO) and reactor operator not recognizing that the suction path to the 'B' RHR pump was isolated prior to starting the pump.

This finding was considered more than minor because it: 1) affected the mitigating systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events, and 2) involved the human performance attribute of the mitigating systems cornerstone. The finding was determined to be of very low risk significance since the inadequate procedure place keeping did not result in a design or qualification deficiency, an actual loss of safety function, or involve internal or external initiating events.

Inspection Report# : [2003009\(pdf\)](#)



Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Design control violation for the failure to assure that the regulatory requirements and the design basis were accurately maintained for the battery chargers

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," because Technical Specification Surveillance Requirement 3.8.4.6 for testing the safety-related battery chargers was non-conservative in relation to the design basis calculation for battery charger sizing.

This finding is greater than minor because it affected the mitigating systems cornerstone objective. This finding is of very low safety significance because it was a design deficiency that did not result in the loss of function.

Inspection Report# : [2003007\(pdf\)](#)



Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Design control violation for the failure to revise voltage drop calculations

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," because the licensee failed to maintain the 125-volt direct current (VDC) voltage drop calculations accurate and up-to-date.

This finding is greater than minor because it affected the mitigating systems cornerstone objective. This finding is of very low safety significance because it was a design deficiency that did not result in the loss of function.

Inspection Report# : [2003007\(pdf\)](#)



Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective action violation for untimely correction of equipment not environmentally qualified

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action." Specifically, the licensee failed to implement timely corrective action (for over 5 years) for safety-related electrical equipment in the primary auxiliary building (PAB) that was not environmentally qualified, a condition adverse to quality.

This finding is greater than minor because if left uncorrected, the finding would become a more significant safety concern and have adverse effects on the capability to prevent or mitigate the consequences of accidents. The finding is of very low safety significance because it was a design deficiency that did not result in the loss of function.

Inspection Report# : [2003007\(pdf\)](#)



Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.49 violation for equipment not environmentally qualified

The inspectors identified a Non-Cited Violation of 10 CFR 50.49(f). Specifically, the licensee identified equipment important to safety located in the primary auxiliary building that would be susceptible to a harsh environment during a postulated high-energy line break but failed to environmentally qualify that equipment.

This finding is greater than minor because if left uncorrected, the finding would become a more significant safety concern and have adverse effects on the capability to prevent or mitigate the consequences of accidents. The finding is of very low safety significance because it was a design deficiency that did not result in the loss of function.

Inspection Report# : [2003007\(pdf\)](#)

G

Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Test control violation for not including several manual CCW valves in the inservice testing program

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," because the licensee failed to include in the inservice testing program manual component cooling water (CCW) valves that were required to perform a safety function.

This finding is greater than minor because it could have affected the mitigating cornerstone objective of ensuring the availability of the CCW or residual heat removal (RHR) systems when required to respond to the initiating event. The finding is of very low safety significance because it did not represent an actual loss of safety function.

Inspection Report# : [2003007\(pdf\)](#)

G

Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate procedure violation for inaccurate setpoints in EOPs

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." Specifically, the licensee failed to include appropriate quantitative setpoint values for the minimum low head safety injection "A" train flow in plant emergency operating procedures (EOPs).

This finding is greater than minor because it could have affected the mitigating cornerstone objective of ensuring the availability of the low head safety injection system when required to respond to the initiating event. The finding is of very low safety significance because it did not represent an actual loss of safety function.

Inspection Report# : [2003007\(pdf\)](#)

G

Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Appendix R violation for failure to ensure air would be available to charging pumps

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix R, Section III.L.1.c. Specifically, the licensee failed to ensure, without the need for "hot standby repairs," adequate control air to the speed controllers for the charging pumps during a postulated fire requiring an alternative shutdown method.

This finding is greater than minor because the finding would become a more significant safety concern if left uncorrected. The finding is of very low safety significance because it is likely that the licensee would have been successful in completing the repairs and allowing the plant to be maintained in hot standby until cold shutdown could be achieved.

Inspection Report# : [2003007\(pdf\)](#)

G

Significance: Sep 30, 2003

Identified By: NRC

Item Type: FIN Finding

Operating Test Grading Disagreement

The inspectors identified a finding of very low risk significance concerning a grading discrepancy between the facility licensee and the NRC inspectors during the NRC licensed operator requalification annual operating test. The grading disagreement involved a pass-fail decision on one operating crew and two licensed operators' performance during the simulator scenario portion of the operating test. Specifically, the crew inadequately diagnosed and mitigated a component cooling water leak event which later caused an unexpected manual reactor trip. In addition, the senior operator, while implementing the Emergency Plan, failed to make proper and accurate off-site notifications. The licensee failed to adequately assess the pass/fail

evaluation for the poor performance by the crew and operators that would have potentially resulted in an operational test failure.

This finding was considered more than minor because improper grading of a crew or an individual was considered a risk important issue in that operators or crews with unsatisfactory performance could be placed on shift without proper remediation. Furthermore, there was the realistic potential of providing negative training based on improper assessment of operator performance. Specifically, poor performance on the simulator could potentially lead to improper operator actions on the actual plant. The finding was of very low safety significance because the poor performance and incorrect actions were on the simulator and not on the actual plant. Furthermore, no actual plant emergency occurred and there was no actual impact on equipment or personnel safety. No violation of regulatory requirements occurred.

Inspection Report# : [2003004\(pdf\)](#)



Significance: Sep 30, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Required Performance Testing Per 10 CFR 55.46

The inspectors identified a Non-Cited Violation (NCV) of 10 CFR 55.46(d)(1), "Continued Assurance of Simulator Fidelity." The inspectors identified one example of failure to meet the performance requirements in maintaining simulator fidelity throughout the life of the simulation facility. Specifically, the facility licensee failed to conduct one particular performance test throughout the life of the simulator (since 1991) in accordance with the committed testing requirements of ANSI/ANS-3.5-1985, "Nuclear Power Plant Simulators for Use in Operator Training."

This finding was considered more than minor because of the realistic potential of providing negative training based on simulator deficiencies compared to the actual plant existed. Specifically, inadequate testing of the simulator to assure that the simulator appropriately replicated the actual plant could potentially have affected operator actions on the actual plant. The finding was of very low safety significance because the discrepancy was on the simulator and the actual plant functioned properly. Furthermore, no actual plant emergency occurred and there was no actual impact on equipment or personnel safety.

Inspection Report# : [2003004\(pdf\)](#)



Significance: Jun 30, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement Risk Management Actions for Components Made Unavailable by Pre-Planned Work Activities

The inspectors identified a Non-Cited Violation of 10 CFR 50.65(a)(4) for failure to implement required risk management actions during calibration of volume control tank level transmitters during September 2002 and January 2003. The primary cause of this finding was related to the cross-cutting area of human performance in that probabilistic risk assessment, production planning, and on-shift personnel had not utilized the full capabilities of the risk assessment tool to recognize the unavailability of components associated with pre-planned work activities.

The finding is greater than minor because, if left uncorrected, it would become a more significant safety concern if risk assessments that had not considered the impact of equipment and components rendered unavailable by pre-planned activities resulted in high risk levels without compensatory risk management analyses in place. The finding is of very low significance because it was not a design or qualification deficiency, did not represent an actual loss of the safety function, and did not involve internal or external initiating events.

Inspection Report# : [2003003\(pdf\)](#)



Significance: Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

Apparent violation of 10 CFR Part 50, Appendix B, Criterion III, for the failure to establish the appropriate design control measures for the installation of orifices to the AFW recirculation lines

An apparent violation was identified, in part, through a self-revealing event when decreased auxiliary feedwater pump recirculation flow was noted during post-maintenance testing. Subsequent licensee and NRC review of the event determined that the licensee had installed incorrectly designed orifices in each of the pump recirculation lines. The orifices, due to small clearances, were susceptible to plugging. The primary causes of this finding were inadequacies in the licensee's design process and the licensee's implementation of the process, including the identification of system design requirements and the development of supporting safety evaluations.

The issue has been preliminarily determined to have high safety significance (Red). Following installation of the inadequately designed orifices, the entire auxiliary feedwater system was susceptible to a common mode failure during operations using service water. Failure of auxiliary feedwater during several initiating events could lead to core damage. The installation of the incorrectly designed orifices in the recirculation lines is an apparent violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

On December 11, 2003, the final significance determination letter was issued for this finding. It was determined that this is a RED finding for Unit 2 and a YELLOW finding for Unit 1. For tracking purposes, identical findings were opened for Unit 1 (designated as YELLOW) and Unit 2 (designated as RED).

Inspection Report# : [2002015\(pdf\)](#)

Significance: N/A Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

The failure to identify the root cause and implement corrective actions for the AFW/IA issue, a significant condition adverse to quality, so as to prevent recurrence.

A violation was identified for the licensee's failure to implement adequate corrective actions to effectively address a previous Red finding and preclude recurrence (Inspection Report 50-266/01-17; 50-301/01-17). Specifically, the licensee failed to identify potential common mode failures that existed involving power supplies to the recirculation line air-operated valve and other system components. In addition, the licensee's corrective actions for the potential common mode failure associated with a loss of instrument air did not preclude repetition. Specifically, the licensee's corrective actions, to upgrade the safety function of the air-operated recirculation valve, failed to ensure that successful operation of the recirculation line air-operated valve was dependent only on safety-related support systems. Following the corrective actions, successful operation of the valve was still dependent upon nonsafety-related power to an interposing relay. Additionally, the corrective actions failed to discover a single failure mechanism involving a system orifice modification.

The issue was more than minor because the failure to implement appropriate corrective actions resulted in the auxiliary feedwater system continuing to rely on nonsafety-related support systems and to be susceptible to a single event causing a total system failure. The failure of nonsafety-related support systems and single event failures are an expected condition during several design basis accidents and should not cause a safety system to fail. The failure of the licensee to implement adequate corrective actions is a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action."

This violation is associated with a previously identified RED finding (IR 50-266;50-30/01-17).

Inspection Report# : [2002015\(pdf\)](#)**Significance:** Feb 28, 2002

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002.

Inspection Report 50-266/02-15; 50-301/02-15, issued April 2, 2003, documented the NRC decision that this finding is not an Old Design Issue.

Inspection Report# : [2001017\(pdf\)](#)Inspection Report# : [2003003\(pdf\)](#)

Barrier Integrity

**Significance:** Mar 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Containment Upper Hatch Interlock

The inspectors identified an NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) for failing to properly document a modification of the containment hatch interlock. The licensee failed to perform an engineering design change analysis for the Unit 1 personal containment hatch upper interlock cable when it was identified that original design specifications were not met. Specifically, the cable was replaced with a smaller cable prior to 2000 and again in 2000. When the cable broke in 2004, engineers replaced the cable with one that met the original design specifications, correcting the violation.

The inspectors determined that the finding was more than minor because it affected the barrier integrity reactor safety cornerstone objective attribute of maintaining functionality of containment design control. The finding was considered to be of very low safety significance because it did not result in an actual open pathway in the physical integrity of the reactor containment or actual reduction of the atmospheric pressure control function of the reactor containment.

Inspection Report# : [2004002\(pdf\)](#)

**Significance:** Jun 30, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Need for a Unit 2 Containment Cooling Fan Discharge Damper Temporary Modification Not Identified in a Timely Manner

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for not taking appropriate and timely corrective actions to fully assess and correct degraded conditions associated with the safety-related Unit 2 containment cooling fan backdraft damper, 2W-1D2-A, during thermal performance testing activities on March 20, 2003. The primary cause of this finding was related to the cross-cutting area of human performance. Despite the involvement of the test coordinator, control room operating supervisor, and system engineer, incomplete communications and coordination resulted in damper parts on the cooling fan plenum floor not being fully identified as components affecting operation of the safety-related damper. The condition adverse to quality was identified 13 days later when, on April 2, 2003, a mechanic passing through a radiologically controlled machine shop, identified the damper counterweight amongst other controlled material.

The finding was more than minor because: 1) it affected the reactor safety barrier integrity cornerstone objective of maintaining the functionality of primary containment, in that the reliability and availability of the Unit 2, 'D' containment cooling fan, a risk significant large-early-release component, was affected, and 2) if left uncorrected, would become a more significant safety concern if components relied upon to perform safety-related functions were returned to service prior to fully assessing and correcting degraded conditions. The finding was determined to be of very low risk significance since the degraded backdraft damper did not represent a degradation of the radiological barrier function of the control room, auxiliary building, or spent fuel pool; did not represent degradation of the barrier function of the control room against smoke or a toxic atmosphere; and did not represent an actual open pathway in the physical integrity of reactor containment or an actual reduction of the atmospheric pressure control function of the reactor containment.

Inspection Report# : [2003003\(pdf\)](#)

Emergency Preparedness

**Significance:** Mar 31, 2004

Identified By: NRC

Item Type: FIN Finding

Steam Generator Narrow Range Level Setpoints Revised in Safety-Related Procedures but not in Emergency Plan General Emergency EAL 3.1.1.4

The inspectors identified a finding of very low safety significance concerning an inadequate extent-of-condition review during safety-related procedure revisions associated with steam generator narrow range level setpoints, and the failure to recognize the impact of the setpoint changes on the Point Beach Emergency Plan. The primary cause of this finding was related to the cross-cutting area of human performance in four respects. First, at least four personnel, including a Shift Manager (SM) and two senior reactor operators (SROs), reviewed the procedure changes but failed to recognize the potential impact of the procedure changes on the emergency plan. Second, personnel associated with the corrective action process for the initial steam generator narrow range level density compensation issue failed to recognize the potential emergency plan impact and raise the issue to the attention of emergency preparedness personnel. Third, despite the emergency preparedness reviews completed prior to and during the 95003 supplemental inspection process, the licensee had not identified and evaluated the potential impacts of the discrepancy between the procedure setpoints and Emergency Action Level 3.1.1.4. Fourth, until identified by the inspectors, personnel involved with efforts to achieve regulatory compliance with eight emergency action levels (EALs) during January 2004, had not recognized or evaluated the potential impact of the discrepancy.

This finding was considered more than minor because it: (1) involved the procedure quality attribute of the emergency preparedness reactor safety cornerstone; and (2) if left uncorrected, it could become a more significant safety concern if the discrepancy in steam generator narrow range level setpoints prevented, or caused a delay in, declaring a general emergency during a loss of electrical power event. The finding was not considered a violation of regulatory requirements.

Inspection Report# : [2004002\(pdf\)](#)**Significance:** Dec 31, 2003

Identified By: NRC

Item Type: FIN Finding

Protective action recommendation training for Licensed Reactor Operator using an outdated procedure

The inspectors identified a finding of very low safety significance when they observed that the licensee failed to use the current revision to safety-related Emergency Plan Implementing Procedure (EPIP) 1.3, "Tools for Dose Assessment," during a licensed operator requalification training class. This was the final scheduled class for this topic and the only one that was taught after the procedure had been revised on November 26, 2003. In addition, the inspectors noted that the training failed to include sheltering as a protective action recommendation option. This occurred despite the procedure having been changed the week before specifically to allow consideration of the sheltering option. The primary cause of this finding was related to the cross-cutting area of human performance in two respects. First, the decision not to train on the sheltering option represented a missed opportunity to train personnel on the full range of available protective action recommendations. Second, members of Operations management and Emergency Planning supervision failed to stop the training despite having been informed at the beginning of the class that the most current revision would not be used.

The finding was considered more than minor because it: (1) involved the emergency response organization readiness and response organization performance training attributes of the Reactor Safety/Emergency Preparedness cornerstone; and (2) if left uncorrected, it could lead to inadequate performance of protective action recommendations, actions intended to protect the health and safety of the public. The finding was not a violation of regulatory requirements.

Inspection Report# : [2003009\(pdf\)](#)



Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.54, 10 CFR 50.47 violation for failure to assign adequate emergency response organization staffing

The inspectors identified a Non-Cited Violation of emergency planning standard 10 CFR 50.47(b)(2) because the licensee failed to assign onshift responsibilities for reading facility seismic monitors, thereby affecting the ability to timely classify certain seismic emergency events.

This finding is greater than minor because it was associated with a cornerstone attribute and affected the emergency preparedness cornerstone objective to ensure the adequate protection of the public health and safety. This finding is of very low safety significance because it was a degradation in the emergency response organization (ERO) onshift staffing and did not represent a planning standard function failure.

Inspection Report# : [2003007\(pdf\)](#)

Significance: SL-IV Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.9 violation for failure to report in the third quarter of 2001 that the emergency response organization performance indicator crossed the significance threshold from green to white

The inspectors identified a Severity Level IV Non-Cited Violation of 10 CFR 50.9 because the licensee failed to provide complete and accurate information in the submittal of information for the emergency response organization (ERO) performance indicator (PI). Twenty-three onshift communicators should have been tracked and reported in the ERO PI, but were not. The licensee has subsequently submitted corrected PI data to the NRC.

This issue is greater than minor because it caused the PI to cross the Green-to-White threshold for the 3rd quarter of 2001. Because this issue affected the NRC's ability to perform its regulatory function, it was evaluated with the traditional enforcement process.

Inspection Report# : [2003007\(pdf\)](#)



Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.54, 10 CFR 50.47 violation for the failure to develop and implement a training program for the emergency planning staff

The inspectors identified a Non-Cited Violation of emergency planning standard 10 CFR 50.47(b)(16) because the licensee failed to develop and implement an emergency planning staff training program to ensure that emergency planners were properly trained.

This finding is greater than minor because it was associated with a cornerstone attribute and affected the emergency preparedness cornerstone objective to ensure the adequate protection of the public health and safety. This finding is of very low safety significance because lack of a staff training program presented a potential degrading condition for the level of qualification and proficiency of the emergency preparedness staff, but did not represent a failure of the planning standard function.

Inspection Report# : [2003007\(pdf\)](#)

Significance: TBD Dec 16, 2003

Identified By: NRC

Item Type: AV Apparent Violation

10 CFR 50.54, 10 CFR 50.47 apparent violation for failure to maintain a standard scheme of emergency action levels

The inspectors identified an apparent violation of 10 CFR 50.54(q), associated with emergency planning standard 10 CFR 50.47(b)(4), which will be subject to the NRC traditional enforcement process not the revised Reactor Oversight Process. Specifically, the licensee failed to maintain a standard scheme of emergency action levels (EALs). Eight EALs were changed in 1998 and 1999. The changes decreased the effectiveness of the Emergency Plan in that emergency conditions that would have resulted in classifications at the General Emergency (GE), Alert, and Notification of Unusual Event (NOUE) levels would result in a lesser classification under the current EAL scheme. Approval of the NRC was not obtained prior to the changes being made. Since the identification of the issue by the inspectors, the licensee has revised the eight EALs to be equivalent with those approved by the NRC in 1984.

Inspection Report# : [2003007\(pdf\)](#)



Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.54, 10 CFR 50.47 violation for failure to ensure that the facility seismic monitors could support NOUE declaration

The inspectors identified a Non-Cited Violation of emergency planning standard 10 CFR 50.47(b)(4) because the licensee failed to properly calibrate the facility seismic monitors to ensure they were capable of supporting implementation of a Notice of Unusual Event EAL.

This finding is greater than minor because it was associated with a cornerstone attribute and affected the emergency preparedness cornerstone objective to ensure the adequate protection of the public health and safety. This finding is of very low safety significance because a Notice of Unusual Event could still be declared based on ground shaking.

Inspection Report# : [2003007\(pdf\)](#)

Significance: N/A Apr 15, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Decreased an Emergency Plan Commitment Without Prior NRC Approval

In October 1998, the licensee decreased its Emergency Plan's effectiveness without prior NRC approval due to an inadequate 10 CFR 50.54(q) review of six Emergency Response Organization (ERO) positions, which the licensee re-categorized from being 30 minute response positions to be 60 minute response positions. These six positions were re-established as 30 minute response positions in late January 2003. This Severity Level IV violation is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2002014\(pdf\)](#)

Occupational Radiation Safety

Significance:  Oct 09, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to control access to a Very High Radiation Area

Green. A finding of very low safety significance and an associated Non-Cited Violation (NCV) was identified through a self-revealing event, when the key for the Unit 2 Keyway (i.e. a posted Very High Radiation Area [VHRA], which had been established prior to withdrawing the thimbles) was improperly controlled, and thus the access to the keyway was improperly controlled for several hours. Despite adequate station procedures and training (i.e. of Radiation Protection personnel) for proper VHRA key control and requirements to post and guard VHRAs the gate was left unguarded for several hours.

Inspection Report# : [2003009\(pdf\)](#)

Public Radiation Safety

Significance:  Oct 11, 2003

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Failure to perform adequate surveys

Green. A finding of very low safety significance and an associated Non-Cited Violation (NCV) was identified through a self-revealing event, when a valve was shipped from Point Beach Nuclear Plant without being identified as radioactive material. An inadequate radiological survey of 2CV-203 was performed (i.e. to determine the concentrations or quantities of radioactive materials inside the valve). Licensed radioactive material was found by the vendor at their repair facility (i.e. inside the valve), prior to performing work on the valve. Despite adequate station procedures and training (i.e. of Radiation Protection personnel) for proper determination of materials being evaluated for release or control at the Radiologically Controlled Area boundary, the valve was inadequately surveyed and released for shipment to the vendor, as unrestricted material.

Inspection Report# : [2003009\(pdf\)](#)

Significance:  May 14, 2003

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Failure to Maintain Control of Licensed Radioactive Material in an Unrestricted Area and that was not in Storage

The licensee identified a self-revealing violation of 10 CFR 20.1802, involving the failure to maintain control and constant surveillance of licensed radioactive material in an unrestricted area (an instrument and calibration training laboratory) that was not in storage. The material was an unaccounted for, 1.0 microcurie strontium-90/yttrium-90 check source, installed in an area radiation monitor.

The finding was more than minor because it was associated with the "Program and Process" attribute of the Public Radiation Safety Cornerstone and affected the cornerstone objective of ensuring adequate protection of public health and safety from exposure to radioactive materials released into the public domain. This was a legacy issue, for which the apparent cause occurred prior to implementation of an effective radioactive material source control program in 1998. However, this finding was of very low safety significance in that public radiation exposure was not greater than 0.005 rem and the licensee did not have more than five radioactive material control occurrences (in the previous eight quarters). Thus, this finding will be documented as a Non-Cited Violation of 10 CFR 20.1802, for the licensee's failure to maintain control of licensed radioactive material in an unrestricted area that was not in storage.

Inspection Report# : [2003003\(pdf\)](#)

Physical Protection

Miscellaneous

Last modified : July 21, 2004

Point Beach 2

2Q/2004 Plant Inspection Findings

Initiating Events

Significance: G Dec 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate corrective actions for control of transient combustibles

The inspectors identified a Non-Cited Violation involving a finding of very low safety significance concerning the licensee's failure to take effective corrective actions to address the control of transient combustibles. Specifically, the licensee failed to correctly determine the cause (i.e., transient combustibles) of exceeding an NRC Safety Evaluation Report fire loading value for a fire zone. As a result of ineffective corrective actions, the inspectors identified additional instances in which transient combustibles were not appropriately evaluated as required. The primary cause of this finding was related to the cross-cutting area of problem identification and resolution. Despite the escalation of fire loading issues by the licensee's quality assurance organization in October 2002, combustible materials were reintroduced into the same fire zone without prior evaluation by November 2003.

This finding was more than minor because the finding, if uncorrected, could become a more significant safety concern and affect the Initiating Events cornerstone by increasing the likelihood or severity of fire. The finding was of very low safety significance because no fire protection features were affected and no instances were observed where the fire loading could cause either a fire barrier or an installed suppression system to be overwhelmed. This issue was a violation of a license condition which, by reference, invoked the licensee's Fire Protection Evaluation Report (FPER), which required conditions adverse to fire protection, such as uncontrolled combustible material, be promptly identified, reported, and corrected. The FPER also required that in the case of significant or repetitive conditions adverse to fire protection, the cause of the conditions is to be determined and analyzed and prompt corrective actions taken to preclude recurrence.

Inspection Report# : [2003009\(pdf\)](#)

Significance: SL-IV Dec 22, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform an Adequate Safety Evaluation for Changes to the Plant as Described in the USAR

Description

On October 16, 2001, the licensee completed Safety Evaluation (SE) 2001-0057. This safety evaluation deleted Technical Requirements Manual (TRM) Surveillance Requirement TSR 3.5.1.3, which required that the licensee verify, every 92 days, that the "charging pumps develop required flow rate, as specified by the Inservice Testing [IST] Program." Because the TRM is part of the plant USAR, the performance of a safety evaluation was required.

In the safety evaluation, the licensee justified the deletion of the requirement by stating, "Based on the fact that the PBNP Charging Pumps are not credited with an active safety function that would require IST Program testing, the Charging Pump IST surveillance requirement need not be carried over to the TRM." The reasoning for the change was entirely based upon the charging pumps having no safety function. While this appeared to be adequate justification to delete the IST requirement for the pumps, it did not justify the deletion of the TRM Surveillance Requirement. As stated in the PBNP Bases for TRM TLCO 3.5.1, the function of the charging pumps in support of the Chemical and Volume Control System (CVCS) is described as follows, "The amount of boric acid injection must be sufficient to compensate for the addition of positive reactivity from the decay of xenon after a reactor trip from full power in order to maintain the required shutdown margin. This can be accomplished through the operation of one charging pump taking suction from the RWST." TSR 3.5.1.3 measured the flow rate to ensure that the charging pumps could support this function. When TSR 3.5.1.3 was deleted, this function was not evaluated in the safety evaluation. Consequently, the discussion, as presented in SE 2001-0057, only evaluated the removal of the IST requirements for the charging pumps, but did not evaluate the effects of removing the TRM Surveillance Requirement.

The inspector determined that this was a violation of 10 CFR 50.59 in that the licensee did not provide bases that the deletion of TSR 3.5.1.3 was acceptable without a license amendment. However, even though TSR 3.5.1.3 had been deleted, the licensee had still been performing a quarterly flow rate test of the charging pumps for the purpose of testing the charging pump discharge check valves. The inspectors determined that the flow rate measured in this quarterly test was sufficient to meet the requirements in TSR 3.5.1.3.

Analysis

Because violations of 10 CFR 50.59 are considered to be violations that potentially impede or impact the regulatory process, they are dispositioned using the traditional enforcement process instead of the SDP. In this case, the licensee's failure to perform an adequate safety evaluation in accordance with 10 CFR 50.59 resulted in a TRM Surveillance Requirement, TSR 3.5.1.3, being removed inappropriately.

This finding is more than minor because if left uncorrected, the finding would become a more significant safety concern. However, based upon the inspector's review, it was determined that the licensee's failure to provide the required basis for the 50.59 safety evaluation was an issue of very low safety significance. This was based upon the inspector determining that the measured quarterly charging pump flow rate for the discharge check valves test was sufficient to meet the requirements of the deleted TRM Surveillance Requirement. Therefore, since this issue was determined to be of very low safety significance, this finding was considered to be a Green finding.

Enforcement

10 CFR 50.59(d)(1) states, in part, that the licensee shall maintain records of changes in the facility, of changes in procedures, and of tests and experiments. These records must include a written evaluation which provides the bases for the determination that the change, test, or experiment does not require a license amendment.

Contrary to the above, in their safety evaluation, SE 2001-0057, the licensee failed to provide a basis for the determination that the deletion of the TRM Surveillance Requirement, part of the plant's USAR, was acceptable without a license amendment. The results of this violation were determined to be of very low safety significance; therefore, this violation of the requirements in 10 CFR 50.59 was classified as a Severity Level IV Violation. However, because this non-willful violation was non-repetitive, and was captured in the licensee's corrective action program (CAP052416), it is considered a Non-Cited Violation (NCV 50-266, 50-301/03-10-01 (DRS)) consistent with VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2003010\(pdf\)](#)

Significance:  Sep 30, 2003

Identified By: NRC

Item Type: FIN Finding

Unit 2 SI During Start-up

A finding of very low safety significance was self-revealed when Unit 2 operators failed to identify that the main feedwater regulating valves (MFRVs) were in the automatic mode with a signal to open when the reactor trip breakers were closed during a reactor startup. The resultant flow of lower temperature water into the steam generators reduced reactor coolant system (RCS) temperatures causing pressurizer level to decrease to the point that operators initiated a manual safety injection (SI) and reactor trip signal. The primary cause of this finding was related to the cross-cutting area of human performance. Despite at least four licensed reactor operators having discussed the abnormality of leaving the MFRVs in the automatic mode with senior reactor operators prior to the reactor startup attempt, no changes were made. In addition, the entire operations crew on the evening of July 11, 2003, failed to recognize the expected system responses when closing the reactor trip breakers.

The inspectors determined that the finding was more than minor because it: (1) involved the configuration control and human performance attributes of the Initiating Events cornerstone; and (2) affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown operations. The finding was of very low safety significance because it did not contribute to the likelihood of a primary or secondary system loss-of-coolant accident (LOCA), did not contribute to both the likelihood of a reactor trip and mitigating equipment unavailability, and did not increase the likelihood of a fire or flooding event. No violation of NRC requirements occurred.

Inspection Report# : [2003004\(pdf\)](#)

Mitigating Systems

Significance:  Jun 30, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Safety Injection System Accumulator Operated With Fluid Level Above Technical Specification Surveillance Requirement Limits

An NCV of Technical Specification (TS) Surveillance Requirement (SR) 3.5.1.2 was self-revealed when the water volume in the Unit 2 safety injection (SI) accumulator, 2T-34A, exceeded the TS limit of 1136 cubic feet.

The finding is greater than minor because it affected the Reactor Safety Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events. The finding was considered to be of very low safety significance since: (1) the Nuclear Steam Supply System vendor performed an analysis of the over-filled, as-found condition and determined that the 2T-34A accumulator had been capable of performing the design basis function and would not have challenged the 10 CFR 50.46 Loss-of-Coolant-Accident acceptance criteria, and (2) the finding did not result in a design or qualification deficiency, an actual loss of safety function, or involve internal or external initiating events. The licensee has entered this finding into its corrective action (CA) program.

Inspection Report# : [2004003\(pdf\)](#)

Significance:  Mar 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Sprinkler Head Locations Not in Accordance with Fire Code

The inspectors identified an NCV of the license for the failure of the licensee to install sprinkler heads in accordance with the applicable fire code in the component cooling water (CCW) pump area. Specifically, the sprinkler heads were located a greater distance below the ceiling than permitted by code.

This finding was more than minor because it was associated with the protection against external factors (i.e., fire) attribute of the mitigating systems reactor safety cornerstone and affected the cornerstone objective in that a fire protection feature (i.e., an automatic suppression system) was adversely affected. The finding was of very low safety significance because manual fire fighting and auxiliary feedwater (AFW) could be credited. This issue is a violation of a license condition and the applicable fire code which requires that sprinkler heads be located near the ceiling.

Inspection Report# : [2004002\(pdf\)](#)

G**Significance:** Dec 31, 2003

Identified By: NRC

Item Type: FIN Finding

Inadequate risk assessment associated with removing RHR pumps from the shutdown cooling mode of operation

The finding was considered more than minor because: (1) failure to recognize the increased risk condition resulted in compensatory risk management actions to protect the remaining reactor decay heat removal paths not being taken, actions intended to prevent entry into an unplanned orange or red risk condition; and (2) if left uncorrected, it would become a more safety significant concern, if elevated reactor decay heat removal risk categories were entered without the required risk management actions in place and subsequent heat removal challenges were to occur. The finding was of very low significance because it was not a design or qualification deficiency, did not represent an actual loss of the safety function, and did not involve internal or external initiating events. The finding was not a violation of regulatory requirements.

Inspection Report# : [2003009\(pdf\)](#)**G****Significance:** Dec 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Operator error results in starting a residual heat removal pump with the suction valve shut

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed when inadequate procedure use resulted in starting a Unit 2 RHR pump with the suction valve shut. The primary cause of this finding was related to the cross-cutting area of human performance. Perceived time pressure, concurrent watch turnovers, lack of specific supervisory briefings, operator fatigue, and ineffective peer and self-checking resulted in a licensed senior reactor operator (SRO) and reactor operator not recognizing that the suction path to the 'B' RHR pump was isolated prior to starting the pump.

This finding was considered more than minor because it: 1) affected the mitigating systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events, and 2) involved the human performance attribute of the mitigating systems cornerstone. The finding was determined to be of very low risk significance since the inadequate procedure place keeping did not result in a design or qualification deficiency, an actual loss of safety function, or involve internal or external initiating events.

Inspection Report# : [2003009\(pdf\)](#)**G****Significance:** Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Design control violation for the failure to assure that the regulatory requirements and the design basis were accurately maintained for the battery chargers

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," because Technical Specification Surveillance Requirement 3.8.4.6 for testing the safety-related battery chargers was non-conservative in relation to the design basis calculation for battery charger sizing.

This finding is greater than minor because it affected the mitigating systems cornerstone objective. This finding is of very low safety significance because it was a design deficiency that did not result in the loss of function.

Inspection Report# : [2003007\(pdf\)](#)**G****Significance:** Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Design control violation for the failure to revise voltage drop calculations

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," because the licensee failed to maintain the 125-volt direct current (VDC) voltage drop calculations accurate and up-to-date.

This finding is greater than minor because it affected the mitigating systems cornerstone objective. This finding is of very low safety significance because it was a design deficiency that did not result in the loss of function.

Inspection Report# : [2003007\(pdf\)](#)**G****Significance:** Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective action violation for untimely correction of equipment not environmentally qualified

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action." Specifically, the licensee failed to implement timely corrective action (for over 5 years) for safety-related electrical equipment in the primary auxiliary building (PAB) that was not environmentally qualified, a condition adverse to quality.

This finding is greater than minor because if left uncorrected, the finding would become a more significant safety concern and have adverse effects on the capability to prevent or mitigate the consequences of accidents. The finding is of very low safety significance because it was a design deficiency that

did not result in the loss of function.

Inspection Report# : [2003007\(pdf\)](#)

G

Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.49 violation for equipment not environmentally qualified

The inspectors identified a Non-Cited Violation of 10 CFR 50.49(f). Specifically, the licensee identified equipment important to safety located in the primary auxiliary building that would be susceptible to a harsh environment during a postulated high-energy line break but failed to environmentally qualify that equipment.

This finding is greater than minor because if left uncorrected, the finding would become a more significant safety concern and have adverse effects on the capability to prevent or mitigate the consequences of accidents. The finding is of very low safety significance because it was a design deficiency that did not result in the loss of function.

Inspection Report# : [2003007\(pdf\)](#)

G

Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Test control violation for not including several manual CCW valves in the inservice testing program

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," because the licensee failed to include in the inservice testing program manual component cooling water (CCW) valves that were required to perform a safety function.

This finding is greater than minor because it could have affected the mitigating cornerstone objective of ensuring the availability of the CCW or residual heat removal (RHR) systems when required to respond to the initiating event. The finding is of very low safety significance because it did not represent an actual loss of safety function.

Inspection Report# : [2003007\(pdf\)](#)

G

Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate procedure violation for inaccurate setpoints in EOPs

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." Specifically, the licensee failed to include appropriate quantitative setpoint values for the minimum low head safety injection "A" train flow in plant emergency operating procedures (EOPs).

This finding is greater than minor because it could have affected the mitigating cornerstone objective of ensuring the availability of the low head safety injection system when required to respond to the initiating event. The finding is of very low safety significance because it did not represent an actual loss of safety function.

Inspection Report# : [2003007\(pdf\)](#)

G

Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Appendix R violation for failure to ensure air would be available to charging pumps

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix R, Section III.L.1.c. Specifically, the licensee failed to ensure, without the need for "hot standby repairs," adequate control air to the speed controllers for the charging pumps during a postulated fire requiring an alternative shutdown method.

This finding is greater than minor because the finding would become a more significant safety concern if left uncorrected. The finding is of very low safety significance because it is likely that the licensee would have been successful in completing the repairs and allowing the plant to be maintained in hot standby until cold shutdown could be achieved.

Inspection Report# : [2003007\(pdf\)](#)

G

Significance: Sep 30, 2003

Identified By: NRC

Item Type: FIN Finding

Operating Test Grading Disagreement

The inspectors identified a finding of very low risk significance concerning a grading discrepancy between the facility licensee and the NRC inspectors during the NRC licensed operator requalification annual operating test. The grading disagreement involved a pass-fail decision on one operating crew and two licensed operators' performance during the simulator scenario portion of the operating test. Specifically, the crew inadequately diagnosed and

mitigated a component cooling water leak event which later caused an unexpected manual reactor trip. In addition, the senior operator, while implementing the Emergency Plan, failed to make proper and accurate off-site notifications. The licensee failed to adequately assess the pass/fail evaluation for the poor performance by the crew and operators that would have potentially resulted in an operational test failure.

This finding was considered more than minor because improper grading of a crew or an individual was considered a risk important issue in that operators or crews with unsatisfactory performance could be placed on shift without proper remediation. Furthermore, there was the realistic potential of providing negative training based on improper assessment of operator performance. Specifically, poor performance on the simulator could potentially lead to improper operator actions on the actual plant. The finding was of very low safety significance because the poor performance and incorrect actions were on the simulator and not on the actual plant. Furthermore, no actual plant emergency occurred and there was no actual impact on equipment or personnel safety. No violation of regulatory requirements occurred.

Inspection Report# : [2003004\(pdf\)](#)

G

Significance: Sep 30, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Required Performance Testing Per 10 CFR 55.46

The inspectors identified a Non-Cited Violation (NCV) of 10 CFR 55.46(d)(1), "Continued Assurance of Simulator Fidelity." The inspectors identified one example of failure to meet the performance requirements in maintaining simulator fidelity throughout the life of the simulation facility. Specifically, the facility licensee failed to conduct one particular performance test throughout the life of the simulator (since 1991) in accordance with the committed testing requirements of ANSI/ANS-3.5-1985, "Nuclear Power Plant Simulators for Use in Operator Training."

This finding was considered more than minor because of the realistic potential of providing negative training based on simulator deficiencies compared to the actual plant existed. Specifically, inadequate testing of the simulator to assure that the simulator appropriately replicated the actual plant could potentially have affected operator actions on the actual plant. The finding was of very low safety significance because the discrepancy was on the simulator and the actual plant functioned properly. Furthermore, no actual plant emergency occurred and there was no actual impact on equipment or personnel safety.

Inspection Report# : [2003004\(pdf\)](#)

R

Significance: Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

Apparent violation of 10 CFR Part 50, Appendix B, Criterion III, for the failure to establish the appropriate design control measures for the installation of orifices to the AFW recirculation lines

An apparent violation was identified, in part, through a self-revealing event when decreased auxiliary feedwater pump recirculation flow was noted during post-maintenance testing. Subsequent licensee and NRC review of the event determined that the licensee had installed incorrectly designed orifices in each of the pump recirculation lines. The orifices, due to small clearances, were susceptible to plugging. The primary causes of this finding were inadequacies in the licensee's design process and the licensee's implementation of the process, including the identification of system design requirements and the development of supporting safety evaluations.

The issue has been preliminarily determined to have high safety significance (Red). Following installation of the inadequately designed orifices, the entire auxiliary feedwater system was susceptible to a common mode failure during operations using service water. Failure of auxiliary feedwater during several initiating events could lead to core damage. The installation of the incorrectly designed orifices in the recirculation lines is an apparent violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

On December 11, 2003, the final significance determination letter was issued for this finding. It was determined that this is a RED finding for Unit 2 and a YELLOW finding for Unit 1. For tracking purposes, identical findings were opened for Unit 1 (designated as YELLOW) and Unit 2 (designated as RED).

Inspection Report# : [2002015\(pdf\)](#)

Significance: N/A Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

The failure to identify the root cause and implement corrective actions for the AFW/IA issue, a significant condition adverse to quality, so as to prevent recurrence.

A violation was identified for the licensee's failure to implement adequate corrective actions to effectively address a previous Red finding and preclude recurrence (Inspection Report 50-266/01-17; 50-301/01-17). Specifically, the licensee failed to identify potential common mode failures that existed involving power supplies to the recirculation line air-operated valve and other system components. In addition, the licensee's corrective actions for the potential common mode failure associated with a loss of instrument air did not preclude repetition. Specifically, the licensee's corrective actions, to upgrade the safety function of the air-operated recirculation valve, failed to ensure that successful operation of the recirculation line air-operated valve was dependent only on safety-related support systems. Following the corrective actions, successful operation of the valve was still dependent upon nonsafety-related power to an interposing relay. Additionally, the corrective actions failed to discover a single failure mechanism involving a system orifice modification.

The issue was more than minor because the failure to implement appropriate corrective actions resulted in the auxiliary feedwater system continuing to rely on nonsafety-related support systems and to be susceptible to a single event causing a total system failure. The failure of nonsafety-related support systems and single event failures are an expected condition during several design basis accidents and should not cause a safety system to fail. The failure

of the licensee to implement adequate corrective actions is a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action."

This violation is associated with a previously identified RED finding (IR 50-266;50-30/01-17).

Inspection Report# : [2002015\(pdf\)](#)

Significance:  Feb 28, 2002

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002.

Inspection Report 50-266/02-15; 50-301/02-15, issued April 2, 2003, documented the NRC decision that this finding is not an Old Design Issue.

Inspection Report# : [2001017\(pdf\)](#)

Inspection Report# : [2003003\(pdf\)](#)

Barrier Integrity

Significance:  Mar 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Containment Upper Hatch Interlock

The inspectors identified an NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) for failing to properly document a modification of the containment hatch interlock. The licensee failed to perform an engineering design change analysis for the Unit 1 personal containment hatch upper interlock cable when it was identified that original design specifications were not met. Specifically, the cable was replaced with a smaller cable prior to 2000 and again in 2000. When the cable broke in 2004, engineers replaced the cable with one that met the original design specifications, correcting the violation.

The inspectors determined that the finding was more than minor because it affected the barrier integrity reactor safety cornerstone objective attribute of maintaining functionality of containment design control. The finding was considered to be of very low safety significance because it did not result in an actual open pathway in the physical integrity of the reactor containment or actual reduction of the atmospheric pressure control function of the reactor containment.

Inspection Report# : [2004002\(pdf\)](#)

Emergency Preparedness

Significance:  Mar 31, 2004

Identified By: NRC

Item Type: FIN Finding

Steam Generator Narrow Range Level Setpoints Revised in Safety-Related Procedures but not in Emergency Plan General Emergency EAL 3.1.1.4

The inspectors identified a finding of very low safety significance concerning an inadequate extent-of-condition review during safety-related procedure revisions associated with steam generator narrow range level setpoints, and the failure to recognize the impact of the setpoint changes on the Point Beach Emergency Plan. The primary cause of this finding was related to the cross-cutting area of human performance in four respects. First, at least four personnel, including a Shift Manager (SM) and two senior reactor operators (SROs), reviewed the procedure changes but failed to recognize the potential impact of the procedure changes on the emergency plan. Second, personnel associated with the corrective action process for the initial steam generator narrow range level density compensation issue failed to recognize the potential emergency plan impact and raise the issue to the attention of emergency preparedness personnel. Third, despite the emergency preparedness reviews completed prior to and during the 95003 supplemental

inspection process, the licensee had not identified and evaluated the potential impacts of the discrepancy between the procedure setpoints and Emergency Action Level 3.1.1.4. Fourth, until identified by the inspectors, personnel involved with efforts to achieve regulatory compliance with eight emergency action levels (EALs) during January 2004, had not recognized or evaluated the potential impact of the discrepancy.

This finding was considered more than minor because it: (1) involved the procedure quality attribute of the emergency preparedness reactor safety cornerstone; and (2) if left uncorrected, it could become a more significant safety concern if the discrepancy in steam generator narrow range level setpoints prevented, or caused a delay in, declaring a general emergency during a loss of electrical power event. The finding was not considered a violation of regulatory requirements.

Inspection Report# : [2004002\(pdf\)](#)



Significance: Dec 31, 2003

Identified By: NRC

Item Type: FIN Finding

Protective action recommendation training for Licensed Reactor Operator using an outdated procedure

The inspectors identified a finding of very low safety significance when they observed that the licensee failed to use the current revision to safety-related Emergency Plan Implementing Procedure (EPIP) 1.3, "Tools for Dose Assessment," during a licensed operator requalification training class. This was the final scheduled class for this topic and the only one that was taught after the procedure had been revised on November 26, 2003. In addition, the inspectors noted that the training failed to include sheltering as a protective action recommendation option. This occurred despite the procedure having been changed the week before specifically to allow consideration of the sheltering option. The primary cause of this finding was related to the cross-cutting area of human performance in two respects. First, the decision not to train on the sheltering option represented a missed opportunity to train personnel on the full range of available protective action recommendations. Second, members of Operations management and Emergency Planning supervision failed to stop the training despite having been informed at the beginning of the class that the most current revision would not be used.

The finding was considered more than minor because it: (1) involved the emergency response organization readiness and response organization performance training attributes of the Reactor Safety/Emergency Preparedness cornerstone; and (2) if left uncorrected, it could lead to inadequate performance of protective action recommendations, actions intended to protect the health and safety of the public. The finding was not a violation of regulatory requirements.

Inspection Report# : [2003009\(pdf\)](#)



Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.54, 10 CFR 50.47 violation for failure to assign adequate emergency response organization staffing

The inspectors identified a Non-Cited Violation of emergency planning standard 10 CFR 50.47(b)(2) because the licensee failed to assign onshift responsibilities for reading facility seismic monitors, thereby affecting the ability to timely classify certain seismic emergency events.

This finding is greater than minor because it was associated with a cornerstone attribute and affected the emergency preparedness cornerstone objective to ensure the adequate protection of the public health and safety. This finding is of very low safety significance because it was a degradation in the emergency response organization (ERO) onshift staffing and did not represent a planning standard function failure.

Inspection Report# : [2003007\(pdf\)](#)

Significance: SL-IV Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.9 violation for failure to report in the third quarter of 2001 that the emergency response organization performance indicator crossed the significance threshold from green to white

The inspectors identified a Severity Level IV Non-Cited Violation of 10 CFR 50.9 because the licensee failed to provide complete and accurate information in the submittal of information for the emergency response organization (ERO) performance indicator (PI). Twenty-three onshift communicators should have been tracked and reported in the ERO PI, but were not. The licensee has subsequently submitted corrected PI data to the NRC.

This issue is greater than minor because it caused the PI to cross the Green-to-White threshold for the 3rd quarter of 2001. Because this issue affected the NRC's ability to perform its regulatory function, it was evaluated with the traditional enforcement process.

Inspection Report# : [2003007\(pdf\)](#)



Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.54, 10 CFR 50.47 violation for the failure to develop and implement a training program for the emergency planning staff

The inspectors identified a Non-Cited Violation of emergency planning standard 10 CFR 50.47(b)(16) because the licensee failed to develop and implement an emergency planning staff training program to ensure that emergency planners were properly trained.

This finding is greater than minor because it was associated with a cornerstone attribute and affected the emergency preparedness cornerstone objective to ensure the adequate protection of the public health and safety. This finding is of very low safety significance because lack of a staff training program

presented a potential degrading condition for the level of qualification and proficiency of the emergency preparedness staff, but did not represent a failure of the planning standard function.

Inspection Report# : [2003007\(pdf\)](#)

Significance: TBD Dec 16, 2003

Identified By: NRC

Item Type: AV Apparent Violation

10 CFR 50.54, 10 CFR 50.47 apparent violation for failure to maintain a standard scheme of emergency action levels

The inspectors identified an apparent violation of 10 CFR 50.54(q), associated with emergency planning standard 10 CFR 50.47(b)(4), which will be subject to the NRC traditional enforcement process not the revised Reactor Oversight Process. Specifically, the licensee failed to maintain a standard scheme of emergency action levels (EALs). Eight EALs were changed in 1998 and 1999. The changes decreased the effectiveness of the Emergency Plan in that emergency conditions that would have resulted in classifications at the General Emergency (GE), Alert, and Notification of Unusual Event (NOUE) levels would result in a lesser classification under the current EAL scheme. Approval of the NRC was not obtained prior to the changes being made. Since the identification of the issue by the inspectors, the licensee has revised the eight EALs to be equivalent with those approved by the NRC in 1984.

Inspection Report# : [2003007\(pdf\)](#)

Significance:  Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.54, 10 CFR 50.47 violation for failure to ensure that the facility seismic monitors could support NOUE declaration

The inspectors identified a Non-Cited Violation of emergency planning standard 10 CFR 50.47(b)(4) because the licensee failed to properly calibrate the facility seismic monitors to ensure they were capable of supporting implementation of a Notice of Unusual Event EAL.

This finding is greater than minor because it was associated with a cornerstone attribute and affected the emergency preparedness cornerstone objective to ensure the adequate protection of the public health and safety. This finding is of very low safety significance because a Notice of Unusual Event could still be declared based on ground shaking.

Inspection Report# : [2003007\(pdf\)](#)

Occupational Radiation Safety

Significance:  Oct 09, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to control access to a Very High Radiation Area

Green. A finding of very low safety significance and an associated Non-Cited Violation (NCV) was identified through a self-revealing event, when the key for the Unit 2 Keyway (i.e. a posted Very High Radiation Area [VHRA], which had been established prior to withdrawing the thimbles) was improperly controlled, and thus the access to the keyway was improperly controlled for several hours. Despite adequate station procedures and training (i.e. of Radiation Protection personnel) for proper VHRA key control and requirements to post and guard VHRAs the gate was left unguarded for several hours.

Inspection Report# : [2003009\(pdf\)](#)

Public Radiation Safety

Significance:  Oct 11, 2003

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Failure to perform adequate surveys

Green. A finding of very low safety significance and an associated Non-Cited Violation (NCV) was identified through a self-revealing event, when a valve was shipped from Point Beach Nuclear Plant without being identified as radioactive material. An inadequate radiological survey of 2CV-203 was performed (i.e. to determine the concentrations or quantities of radioactive materials inside the valve). Licensed radioactive material was found by the vendor at their repair facility (i.e. inside the valve), prior to performing work on the valve. Despite adequate station procedures and training (i.e. of Radiation Protection personnel) for proper determination of materials being evaluated for release or control at the Radiologically Controlled Area boundary, the valve was inadequately surveyed and released for shipment to the vendor, as unrestricted material.

Inspection Report# : [2003009\(pdf\)](#)

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

Last modified : September 08, 2004

Point Beach 2

3Q/2004 Plant Inspection Findings

Initiating Events

G**Significance:** Dec 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate corrective actions for control of transient combustibles

The inspectors identified a Non-Cited Violation involving a finding of very low safety significance concerning the licensee's failure to take effective corrective actions to address the control of transient combustibles. Specifically, the licensee failed to correctly determine the cause (i.e., transient combustibles) of exceeding an NRC Safety Evaluation Report fire loading value for a fire zone. As a result of ineffective corrective actions, the inspectors identified additional instances in which transient combustibles were not appropriately evaluated as required. The primary cause of this finding was related to the cross-cutting area of problem identification and resolution. Despite the escalation of fire loading issues by the licensee's quality assurance organization in October 2002, combustible materials were reintroduced into the same fire zone without prior evaluation by November 2003.

This finding was more than minor because the finding, if uncorrected, could become a more significant safety concern and affect the Initiating Events cornerstone by increasing the likelihood or severity of fire. The finding was of very low safety significance because no fire protection features were affected and no instances were observed where the fire loading could cause either a fire barrier or an installed suppression system to be overwhelmed. This issue was a violation of a license condition which, by reference, invoked the licensee's Fire Protection Evaluation Report (FPER), which required conditions adverse to fire protection, such as uncontrolled combustible material, be promptly identified, reported, and corrected. The FPER also required that in the case of significant or repetitive conditions adverse to fire protection, the cause of the conditions is to be determined and analyzed and prompt corrective actions taken to preclude recurrence.

Inspection Report# : [2003009\(pdf\)](#)**Significance:** SL-IV Dec 22, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform an Adequate Safety Evaluation for Changes to the Plant as Described in the USAR**Description**

On October 16, 2001, the licensee completed Safety Evaluation (SE) 2001-0057. This safety evaluation deleted Technical Requirements Manual (TRM) Surveillance Requirement TSR 3.5.1.3, which required that the licensee verify, every 92 days, that the "charging pumps develop required flow rate, as specified by the Inservice Testing [IST] Program." Because the TRM is part of the plant USAR, the performance of a safety evaluation was required.

In the safety evaluation, the licensee justified the deletion of the requirement by stating, "Based on the fact that the PBNP Charging Pumps are not credited with an active safety function that would require IST Program testing, the Charging Pump IST surveillance requirement need not be carried over to the TRM." The reasoning for the change was entirely based upon the charging pumps having no safety function. While this appeared to be adequate justification to delete the IST requirement for the pumps, it did not justify the deletion of the TRM Surveillance Requirement. As stated in the PBNP Bases for TRM TLCO 3.5.1, the function of the charging pumps in support of the Chemical and Volume Control System (CVCS) is described as follows, "The amount of boric acid injection must be sufficient to compensate for the addition of positive reactivity from the decay of xenon after a reactor trip from full power in order to maintain the required shutdown margin. This can be accomplished through the operation of one charging pump taking suction from the RWST." TSR 3.5.1.3 measured the flow rate to ensure that the charging pumps could support this function. When TSR 3.5.1.3 was deleted, this function was not evaluated in the safety evaluation. Consequently, the discussion, as presented in SE 2001-0057, only evaluated the removal of the IST requirements for the charging pumps, but did not evaluate the effects of removing the TRM Surveillance Requirement.

The inspector determined that this was a violation of 10 CFR 50.59 in that the licensee did not provide bases that the deletion of TSR 3.5.1.3 was acceptable without a license amendment. However, even though TSR 3.5.1.3 had been deleted, the licensee had still been performing a quarterly flow rate test of the charging pumps for the purpose of testing the charging pump discharge check valves. The inspectors determined that the flow rate measured in this quarterly test was sufficient to meet the requirements in TSR 3.5.1.3.

Analysis

Because violations of 10 CFR 50.59 are considered to be violations that potentially impede or impact the regulatory process, they are dispositioned using the traditional enforcement process instead of the SDP. In this case, the licensee's failure to perform an adequate safety evaluation in accordance with 10 CFR 50.59 resulted in a TRM Surveillance Requirement, TSR 3.5.1.3, being removed inappropriately.

This finding is more than minor because if left uncorrected, the finding would become a more significant safety concern. However, based upon

the inspector's review, it was determined that the licensee's failure to provide the required basis for the 50.59 safety evaluation was an issue of very low safety significance. This was based upon the inspector determining that the measured quarterly charging pump flow rate for the discharge check valves test was sufficient to meet the requirements of the deleted TRM Surveillance Requirement. Therefore, since this issue was determined to be of very low safety significance, this finding was considered to be a Green finding.

Enforcement

10 CFR 50.59(d)(1) states, in part, that the licensee shall maintain records of changes in the facility, of changes in procedures, and of tests and experiments. These records must include a written evaluation which provides the bases for the determination that the change, test, or experiment does not require a license amendment.

Contrary to the above, in their safety evaluation, SE 2001-0057, the licensee failed to provide a basis for the determination that the deletion of the TRM Surveillance Requirement, part of the plant's USAR, was acceptable without a license amendment. The results of this violation were determined to be of very low safety significance; therefore, this violation of the requirements in 10 CFR 50.59 was classified as a Severity Level IV Violation. However, because this non-willful violation was non-repetitive, and was captured in the licensee's corrective action program (CAP052416), it is considered a Non-Cited Violation (NCV 50-266, 50-301/03-10-01 (DRS)) consistent with VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2003010\(pdf\)](#)

Mitigating Systems

Significance:  Jul 16, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Test Service Water Headers

The inspectors identified a Non-Cited Violation of 10 CFR 50.55a(g)(4) and 10 CFR 50.55a(g)(5)(iv) associated with failure to perform testing of the buried service water header piping in accordance with the American Society of Mechanical Engineers Code Section XI requirements. The licensee's corrective actions included verifying that quarterly system flow tests provided basis for service water header operability.

This finding was more than minor because it affected the Mitigating Systems Cornerstone objective of equipment reliability and if left uncorrected, could have allowed undetected through-wall flaws to develop in the header piping. These flaws could then continue to grow in size until leakage from the buried headers degraded system operation or if sufficient general corrosion occurs, a gross rupture or collapse of the piping sections could occur. The finding is of very low safety significance and screened as Green using the SDP Phase 1 screening worksheet. Inspection Report# : [2004004\(pdf\)](#)

Significance:  Jul 16, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Correctly Translate Condensate Storage Tank Temperature Limits into Procedures and Instructions

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," in that, the design bases for the maximum Condensate Storage Tank (CST) temperature was not correctly translated into procedures and instructions. Specifically, the Main Steam Line Break (MSLB) Containment Integrity Analysis assumed a maximum value of 100 F for the temperature of the water in the CST, while operations procedures allowed a maximum of 120 F for the CST temperature. This finding applies to both units. The licensee's corrective actions included procedural changes to reflect the correct temperature limit.

This finding was more than minor because an evaluation was required to ensure that accident analysis requirements were met, since the CST was heated up to greater than the maximum analysis value of 100 F during unit startup/shutdown operations with the CST aligned to the operating unit. The finding is of very low safety significance and screened as Green using the SDP Phase 1 screening worksheet. Inspection Report# : [2004004\(pdf\)](#)

Significance:  Jul 16, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Periodically Verify Position of Valves in the SW System

The inspectors identified a Non-Cited Violation of Technical Specification Surveillance Requirements SR 3.7.8.1 and SR 3.6.3.2 associated with the periodic verification of the position of valves and flanges in the service water (SW) system flow paths servicing safety related equipment and in lines associated with containment isolation. Specifically, the licensee did not verify that approximately 100 valves in the SW system flow path servicing safety related equipment that were not locked, sealed, or otherwise secured in position, were in the correct position every 31 days while the Units were in Mode 1, 2, 3, or 4. In addition, the licensee did not verify that 12 containment isolation manual valves were closed and two pipe fittings associated with containment isolation were in place every 31 days while the Units were in Mode 1, 2, 3, or 4.

This finding applies to both units. The licensee's corrective actions included locking the appropriate valves and procedural changes.

This finding was more than minor because it was, for the most part, associated with the Mitigating Systems attribute of Configuration Control, which affected the Mitigating Systems Cornerstone objective of ensuring the availability and reliability of the service water (SW) system to respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance and screened as Green using the SDP Phase 1 screening worksheet.

Inspection Report# : [2004004\(pdf\)](#)

G

Significance: Jul 16, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Translate Original Design Requirements for th4e 480 Vac System

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to adequately translate original design requirements for the 480 Vac system into specifications during procurement of new and replacement equipment. The original specifications for equipment such as motors and cables identified the intended service as suitable for a 480 Vac ungrounded system. Specifications for replacement motors did not specify the intended service as an ungrounded system. The licensee's corrective actions included a verification that the identified equipment that did not specify use in a 480 Vac ungrounded system could withstand the overvoltage conditions that can occur on ungrounded systems.

This finding was more than minor because it involved the design control attribute of the Mitigating Systems cornerstone and affected the objective of ensuring the capability of the safety related 480 Vac system in response to initiating events to prevent undesirable consequences. Specifically, the failure to specify the correct service conditions may have resulted in motors being supplied without the enhanced insulation systems required to withstand the overvoltage conditions that can occur on ungrounded systems when a single line to ground occurs. The finding is of very low safety significance and screened as Green using the SDP Phase 1 screening worksheet.

Inspection Report# : [2004004\(pdf\)](#)

G

Significance: Jun 30, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Safety Injection System Accumulator Operated With Fluid Level Above Technical Specification Surveillance Requirement Limits

An NCV of Technical Specification (TS) Surveillance Requirement (SR) 3.5.1.2 was self-revealed when the water volume in the Unit 2 safety injection (SI) accumulator, 2T-34A, exceeded the TS limit of 1136 cubic feet.

The finding is greater than minor because it affected the Reactor Safety Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events. The finding was considered to be of very low safety significance since: (1) the Nuclear Steam Supply System vendor performed an analysis of the over-filled, as-found condition and determined that the 2T-34A accumulator had been capable of performing the design basis function and would not have challenged the 10 CFR 50.46 Loss-of-Coolant-Accident acceptance criteria, and (2) the finding did not result in a design or qualification deficiency, an actual loss of safety function, or involve internal or external initiating events. The licensee has entered this finding into its corrective action (CA) program.

Inspection Report# : [2004003\(pdf\)](#)

G

Significance: Mar 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Sprinkler Head Locations Not in Accordance with Fire Code

The inspectors identified an NCV of the license for the failure of the licensee to install sprinkler heads in accordance with the applicable fire code in the component cooling water (CCW) pump area. Specifically, the sprinkler heads were located a greater distance below the ceiling than permitted by code.

This finding was more than minor because it was associated with the protection against external factors (i.e., fire) attribute of the mitigating systems reactor safety cornerstone and affected the cornerstone objective in that a fire protection feature (i.e., an automatic suppression system) was adversely affected. The finding was of very low safety significance because manual fire fighting and auxiliary feedwater (AFW) could be credited. This issue is a violation of a license condition and the applicable fire code which requires that sprinkler heads be located near the ceiling.

Inspection Report# : [2004002\(pdf\)](#)

G

Significance: Dec 31, 2003

Identified By: NRC

Item Type: FIN Finding

Inadequate risk assessment associated with removing RHR pumps from the shutdown cooling mode of operation

The inspectors identified a finding of very low risk significance concerning an inadequate risk assessment associated with the 26th Unit 2

refueling outage (U2R26). Specifically, personnel utilizing the core cooling key safety function shutdown risk assessment failed to recognize the unavailability and increased risk associated with removing the residual heat removal (RHR) pumps from the shutdown cooling mode of operation while in Mode 4, hot shutdown. The primary cause of this finding was related to the cross-cutting area of human performance in two respects. First, despite reviewing the activity prior to the outage, probabilistic risk assessment and outage planning personnel did not identify entry into the yellow risk category. Second, once relaxed, operations personnel did not increase the performance frequency of shutdown safety assessment checklists during periods of changing plant conditions, so as to have been able to identify the unavailability and increased risk associated with the activity.

The finding was considered more than minor because: (1) failure to recognize the increased risk condition resulted in compensatory risk management actions to protect the remaining reactor decay heat removal paths not being taken, actions intended to prevent entry into an unplanned orange or red risk condition; and (2) if left uncorrected, it would become a more safety significant concern, if elevated reactor decay heat removal risk categories were entered without the required risk management actions in place and subsequent heat removal challenges were to occur. The finding was of very low significance because it was not a design or qualification deficiency, did not represent an actual loss of the safety function, and did not involve internal or external initiating events. The finding was not a violation of regulatory requirements.

Inspection Report# : [2003009\(pdf\)](#)

G

Significance: Dec 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Operator error results in starting a residual heat removal pump with the suction valve shut

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed when inadequate procedure use resulted in starting a Unit 2 RHR pump with the suction valve shut. The primary cause of this finding was related to the cross-cutting area of human performance. Perceived time pressure, concurrent watch turnovers, lack of specific supervisory briefings, operator fatigue, and ineffective peer and self-checking resulted in a licensed senior reactor operator (SRO) and reactor operator not recognizing that the suction path to the 'B' RHR pump was isolated prior to starting the pump.

This finding was considered more than minor because it: 1) affected the mitigating systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events, and 2) involved the human performance attribute of the mitigating systems cornerstone. The finding was determined to be of very low risk significance since the inadequate procedure place keeping did not result in a design or qualification deficiency, an actual loss of safety function, or involve internal or external initiating events.

Inspection Report# : [2003009\(pdf\)](#)

G

Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Design control violation for the failure to assure that the regulatory requirements and the design basis were accurately maintained for the battery chargers

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," because Technical Specification Surveillance Requirement 3.8.4.6 for testing the safety-related battery chargers was non-conservative in relation to the design basis calculation for battery charger sizing.

This finding is greater than minor because it affected the mitigating systems cornerstone objective. This finding is of very low safety significance because it was a design deficiency that did not result in the loss of function.

Inspection Report# : [2003007\(pdf\)](#)

G

Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Design control violation for the failure to revise voltage drop calculations

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," because the licensee failed to maintain the 125-volt direct current (VDC) voltage drop calculations accurate and up-to-date.

This finding is greater than minor because it affected the mitigating systems cornerstone objective. This finding is of very low safety significance because it was a design deficiency that did not result in the loss of function.

Inspection Report# : [2003007\(pdf\)](#)

G

Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective action violation for untimely correction of equipment not environmentally qualified

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action." Specifically, the licensee

failed to implement timely corrective action (for over 5 years) for safety-related electrical equipment in the primary auxiliary building (PAB) that was not environmentally qualified, a condition adverse to quality.

This finding is greater than minor because if left uncorrected, the finding would become a more significant safety concern and have adverse effects on the capability to prevent or mitigate the consequences of accidents. The finding is of very low safety significance because it was a design deficiency that did not result in the loss of function.

Inspection Report# : [2003007\(pdf\)](#)

G

Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.49 violation for equipment not environmentally qualified

The inspectors identified a Non-Cited Violation of 10 CFR 50.49(f). Specifically, the licensee identified equipment important to safety located in the primary auxiliary building that would be susceptible to a harsh environment during a postulated high-energy line break but failed to environmentally qualify that equipment.

This finding is greater than minor because if left uncorrected, the finding would become a more significant safety concern and have adverse effects on the capability to prevent or mitigate the consequences of accidents. The finding is of very low safety significance because it was a design deficiency that did not result in the loss of function.

Inspection Report# : [2003007\(pdf\)](#)

G

Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Test control violation for not including several manual CCW valves in the inservice testing program

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," because the licensee failed to include in the inservice testing program manual component cooling water (CCW) valves that were required to perform a safety function.

This finding is greater than minor because it could have affected the mitigating cornerstone objective of ensuring the availability of the CCW or residual heat removal (RHR) systems when required to respond to the initiating event. The finding is of very low safety significance because it did not represent an actual loss of safety function.

Inspection Report# : [2003007\(pdf\)](#)

G

Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate procedure violation for inaccurate setpoints in EOPs

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." Specifically, the licensee failed to include appropriate quantitative setpoint values for the minimum low head safety injection "A" train flow in plant emergency operating procedures (EOPs).

This finding is greater than minor because it could have affected the mitigating cornerstone objective of ensuring the availability of the low head safety injection system when required to respond to the initiating event. The finding is of very low safety significance because it did not represent an actual loss of safety function.

Inspection Report# : [2003007\(pdf\)](#)

G

Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Appendix R violation for failure to ensure air would be available to charging pumps

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix R, Section III.L.1.c. Specifically, the licensee failed to ensure, without the need for "hot standby repairs," adequate control air to the speed controllers for the charging pumps during a postulated fire requiring an alternative shutdown method.

This finding is greater than minor because the finding would become a more significant safety concern if left uncorrected. The finding is of very low safety significance because it is likely that the licensee would have been successful in completing the repairs and allowing the plant to be maintained in hot standby until cold shutdown could be achieved.

Inspection Report# : [2003007\(pdf\)](#)

R

Significance: Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

Apparent violation of 10 CFR Part 50, Appendix B, Criterion III, for the failure to establish the appropriate design control measures for the installation of orifices to the AFW recirculation lines

An apparent violation was identified, in part, through a self-revealing event when decreased auxiliary feedwater pump recirculation flow was noted during post-maintenance testing. Subsequent licensee and NRC review of the event determined that the licensee had installed incorrectly designed orifices in each of the pump recirculation lines. The orifices, due to small clearances, were susceptible to plugging. The primary causes of this finding were inadequacies in the licensee's design process and the licensee's implementation of the process, including the identification of system design requirements and the development of supporting safety evaluations.

The issue has been preliminarily determined to have high safety significance (Red). Following installation of the inadequately designed orifices, the entire auxiliary feedwater system was susceptible to a common mode failure during operations using service water. Failure of auxiliary feedwater during several initiating events could lead to core damage. The installation of the incorrectly designed orifices in the recirculation lines is an apparent violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

On December 11, 2003, the final significance determination letter was issued for this finding. It was determined that this is a RED finding for Unit 2 and a YELLOW finding for Unit 1. For tracking purposes, identical findings were opened for Unit 1 (designated as YELLOW) and Unit 2 (designated as RED).

Inspection Report# : [2002015\(pdf\)](#)

Significance: N/A Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

The failure to identify the root cause and implement corrective actions for the AFW/IA issue, a significant condition adverse to quality, so as to prevent recurrence.

A violation was identified for the licensee's failure to implement adequate corrective actions to effectively address a previous Red finding and preclude recurrence (Inspection Report 50-266/01-17; 50-301/01-17). Specifically, the licensee failed to identify potential common mode failures that existed involving power supplies to the recirculation line air-operated valve and other system components. In addition, the licensee's corrective actions for the potential common mode failure associated with a loss of instrument air did not preclude repetition. Specifically, the licensee's corrective actions, to upgrade the safety function of the air-operated recirculation valve, failed to ensure that successful operation of the recirculation line air-operated valve was dependent only on safety-related support systems. Following the corrective actions, successful operation of the valve was still dependent upon nonsafety-related power to an interposing relay. Additionally, the corrective actions failed to discover a single failure mechanism involving a system orifice modification.

The issue was more than minor because the failure to implement appropriate corrective actions resulted in the auxiliary feedwater system continuing to rely on nonsafety-related support systems and to be susceptible to a single event causing a total system failure. The failure of nonsafety-related support systems and single event failures are an expected condition during several design basis accidents and should not cause a safety system to fail. The failure of the licensee to implement adequate corrective actions is a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action."

This violation is associated with a previously identified RED finding (IR 50-266;50-30/01-17).

Inspection Report# : [2002015\(pdf\)](#)

R

Significance: Feb 28, 2002

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002.

Inspection Report 50-266/02-15; 50-301/02-15, issued April 2, 2003, documented the NRC decision that this finding is not an Old Design Issue.

Inspection Report# : [2001017\(pdf\)](#)

Inspection Report# : [2003003\(pdf\)](#)

Barrier Integrity

Emergency Preparedness

Significance:  Mar 31, 2004

Identified By: NRC

Item Type: FIN Finding

Steam Generator Narrow Range Level Setpoints Revised in Safety-Related Procedures but not in Emergency Plan General Emergency EAL 3.1.1.4

The inspectors identified a finding of very low safety significance concerning an inadequate extent-of-condition review during safety-related procedure revisions associated with steam generator narrow range level setpoints, and the failure to recognize the impact of the setpoint changes on the Point Beach Emergency Plan. The primary cause of this finding was related to the cross-cutting area of human performance in four respects. First, at least four personnel, including a Shift Manager (SM) and two senior reactor operators (SROs), reviewed the procedure changes but failed to recognize the potential impact of the procedure changes on the emergency plan. Second, personnel associated with the corrective action process for the initial steam generator narrow range level density compensation issue failed to recognize the potential emergency plan impact and raise the issue to the attention of emergency preparedness personnel. Third, despite the emergency preparedness reviews completed prior to and during the 95003 supplemental inspection process, the licensee had not identified and evaluated the potential impacts of the discrepancy between the procedure setpoints and Emergency Action Level 3.1.1.4. Fourth, until identified by the inspectors, personnel involved with efforts to achieve regulatory compliance with eight emergency action levels (EALs) during January 2004, had not recognized or evaluated the potential impact of the discrepancy.

This finding was considered more than minor because it: (1) involved the procedure quality attribute of the emergency preparedness reactor safety cornerstone; and (2) if left uncorrected, it could become a more significant safety concern if the discrepancy in steam generator narrow range level setpoints prevented, or caused a delay in, declaring a general emergency during a loss of electrical power event. The finding was not considered a violation of regulatory requirements.

Inspection Report# : [2004002\(pdf\)](#)

Significance:  Dec 31, 2003

Identified By: NRC

Item Type: FIN Finding

Protective action recommendation training for Licensed Reactor Operator using an outdated procedure

The inspectors identified a finding of very low safety significance when they observed that the licensee failed to use the current revision to safety-related Emergency Plan Implementing Procedure (EPIP) 1.3, "Tools for Dose Assessment," during a licensed operator requalification training class. This was the final scheduled class for this topic and the only one that was taught after the procedure had been revised on November 26, 2003. In addition, the inspectors noted that the training failed to include sheltering as a protective action recommendation option. This occurred despite the procedure having been changed the week before specifically to allow consideration of the sheltering option. The primary cause of this finding was related to the cross-cutting area of human performance in two respects. First, the decision not to train on the sheltering option represented a missed opportunity to train personnel on the full range of available protective action recommendations. Second, members of Operations management and Emergency Planning supervision failed to stop the training despite having been informed at the beginning of the class that the most current revision would not be used.

The finding was considered more than minor because it: (1) involved the emergency response organization readiness and response organization performance training attributes of the Reactor Safety/Emergency Preparedness cornerstone; and (2) if left uncorrected, it could lead to inadequate performance of protective action recommendations, actions intended to protect the health and safety of the public. The finding was not a violation of regulatory requirements.

Inspection Report# : [2003009\(pdf\)](#)

Significance:  Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.54, 10 CFR 50.47 violation for failure to assign adequate emergency response organization staffing

The inspectors identified a Non-Cited Violation of emergency planning standard 10 CFR 50.47(b)(2) because the licensee failed to assign onshift responsibilities for reading facility seismic monitors, thereby affecting the ability to timely classify certain seismic emergency events.

This finding is greater than minor because it was associated with a cornerstone attribute and affected the emergency preparedness cornerstone objective to ensure the adequate protection of the public health and safety. This finding is of very low safety significance because it was a degradation in the emergency response organization (ERO) onshift staffing and did not represent a planning standard function failure.

Inspection Report# : [2003007\(pdf\)](#)

Significance: SL-IV Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.9 violation for failure to report in the third quarter of 2001 that the emergency response organization performance indicator crossed the significance threshold from green to white

The inspectors identified a Severity Level IV Non-Cited Violation of 10 CFR 50.9 because the licensee failed to provide complete and accurate information in the submittal of information for the emergency response organization (ERO) performance indicator (PI). Twenty-three onshift communicators should have been tracked and reported in the ERO PI, but were not. The licensee has subsequently submitted corrected PI data to the NRC.

This issue is greater than minor because it caused the PI to cross the Green-to-White threshold for the 3rd quarter of 2001. Because this issue affected the NRC's ability to perform its regulatory function, it was evaluated with the traditional enforcement process.

Inspection Report# : [2003007\(pdf\)](#)

G

Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.54, 10 CFR 50.47 violation for the failure to develop and implement a training program for the emergency planning staff

The inspectors identified a Non-Cited Violation of emergency planning standard 10 CFR 50.47(b)(16) because the licensee failed to develop and implement an emergency planning staff training program to ensure that emergency planners were properly trained.

This finding is greater than minor because it was associated with a cornerstone attribute and affected the emergency preparedness cornerstone objective to ensure the adequate protection of the public health and safety. This finding is of very low safety significance because lack of a staff training program presented a potential degrading condition for the level of qualification and proficiency of the emergency preparedness staff, but did not represent a failure of the planning standard function.

Inspection Report# : [2003007\(pdf\)](#)

Significance: SL-III Dec 16, 2003

Identified By: NRC

Item Type: VIO Violation

10 CFR 50.54, 10 CFR 50.47 apparent violation for failure to maintain a standard scheme of emergency action levels

The inspectors identified an apparent violation of 10 CFR 50.54(q), associated with emergency planning standard 10 CFR 50.47(b)(4), which will be subject to the NRC traditional enforcement process not the revised Reactor Oversight Process. Specifically, the licensee failed to maintain a standard scheme of emergency action levels (EALs). Eight EALs were changed in 1998 and 1999. The changes decreased the effectiveness of the Emergency Plan in that emergency conditions that would have resulted in classifications at the General Emergency (GE), Alert, and Notification of Unusual Event (NOUE) levels would result in a lesser classification under the current EAL scheme. Approval of the NRC was not obtained prior to the changes being made. Since the identification of the issue by the inspectors, the licensee has revised the eight EALs to be equivalent with those approved by the NRC in 1984.

In a letter dated March 17, 2004, a Notice of Violation and Proposed Imposition of Civil Penalty - \$60,000, was issued.

Inspection Report# : [2003007\(pdf\)](#)

G

Significance: Dec 16, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50.54, 10 CFR 50.47 violation for failure to ensure that the facility seismic monitors could support NOUE declaration

The inspectors identified a Non-Cited Violation of emergency planning standard 10 CFR 50.47(b)(4) because the licensee failed to properly calibrate the facility seismic monitors to ensure they were capable of supporting implementation of a Notice of Unusual Event EAL.

This finding is greater than minor because it was associated with a cornerstone attribute and affected the emergency preparedness cornerstone objective to ensure the adequate protection of the public health and safety. This finding is of very low safety significance because a Notice of Unusual Event could still be declared based on ground shaking.

Inspection Report# : [2003007\(pdf\)](#)

Occupational Radiation Safety

G

Significance: Oct 09, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to control access to a Very High Radiation Area

Green. A finding of very low safety significance and an associated Non-Cited Violation (NCV) was identified through a self-revealing event, when the key for the Unit 2 Keyway (i.e. a posted Very High Radiation Area [VHRA], which had been established prior to withdrawing the thimbles) was improperly controlled, and thus the access to the keyway was improperly controlled for several hours. Despite adequate station procedures and training (i.e. of Radiation Protection personnel) for proper VHRA key control and requirements to post and guard VHRAs the gate was left unguarded for several hours.

Inspection Report# : [2003009\(pdf\)](#)

Public Radiation Safety

G

Significance: Oct 11, 2003

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Failure to perform adequate surveys

Green. A finding of very low safety significance and an associated Non-Cited Violation (NCV) was identified through a self-revealing event, when a valve was shipped from Point Beach Nuclear Plant without being identified as radioactive material. An inadequate radiological survey of 2CV-203 was performed (i.e. to determine the concentrations or quantities of radioactive materials inside the valve). Licensed radioactive material was found by the vendor at their repair facility (i.e. inside the valve), prior to performing work on the valve. Despite adequate station procedures and training (i.e. of Radiation Protection personnel) for proper determination of materials being evaluated for release or control at the Radiologically Controlled Area boundary, the valve was inadequately surveyed and released for shipment to the vendor, as unrestricted material.

Inspection Report# : [2003009\(pdf\)](#)

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

Last modified : December 29, 2004

Point Beach 2

4Q/2004 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Dec 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50, Appendix B, Criterion XVI, "Corrective Action." Failure to Take Corrective Actions for a Condition Adverse to Quality

A finding of very low safety significance was identified by the inspectors for a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to take actions for a condition adverse to quality. Specifically, in September 2003 a condition report was written to address the susceptibility of fouling of a small mesh strainer installed in a fire protection line which provided emergency cooling to the turbine driven auxiliary feedwater pumps and turbine bearing coolers. The condition report also identified that procedure guidance did not exist for operators to utilize an existing flush valve on the strainer if the strainer became clogged during use. The inspectors identified that in August 2004, the condition report was closed with no actions taken to address this condition adverse to quality. At the end of the inspection, the licensee took corrective actions to ensure that as a minimum, the appropriate procedural guidance existed if the strainer became clogged during use.

The inspectors also concluded the primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to take any corrective actions to correct this condition adverse to quality.

This finding was more than minor because if left uncorrected the finding could become a more significant safety concern. In addition, the finding affected the mitigating systems cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. In accordance with the Significance Determination Process, this finding was determined to be a Non-Cited Violation of very low safety significance because it was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18.

Inspection Report# : [2004012\(pdf\)](#)

Significance: SL-IV Dec 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a Safety Evaluation as Required by 10 CFR 50.59, "Changes, Tests and Experiments"

The inspectors identified a Severity Level IV Non-Cited Violation of 10 CFR 50.59(d)(1) for the licensee's failure to perform a safety evaluation for changes made to the Final Safety Analysis Report. Specifically, the licensee 'screened out' a change to the Final Safety Analysis Report which modified operator response times for the Steam Generator Tube Rupture Chapter 14 Accident Analysis contained in the Final Safety Analysis Report. Specifically, a time requirement for equalizing primary and secondary pressure was removed from the Final Safety Analysis Report. In addition, the licensee changed the time in which isolation of the affected Steam Generator could be achieved from 10 minutes to 30 minutes. At the end of the inspection period the licensee initiated a corrective action to perform a safety evaluation in accordance with 10 CFR 50.59 for this Final Safety Analysis Report change.

Because the Significance Determination Process is not designed to assess the significance of violations that potentially impact or impede the regulatory process, this issue was dispositioned using the traditional enforcement process in accordance with Section IV of the NRC Enforcement Policy. However, the results of the violation were assessed using the Significance Determination Process.

This finding was determined to be more than minor because the inspectors could not reasonably determine that the change would not ultimately require NRC approval. The inspectors determined that even though the change was not adequately evaluated in accordance with 10 CFR 50.59, this violation was of very low safety significance because the design basis safety-related functions of mitigating systems to respond to this initiating event scenario were not adversely affected. The inspectors evaluated the results of the finding using the Significance Determination Process for the mitigating systems cornerstone. The inspectors determined that the results of the finding were of very low safety significance because the finding was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18. Therefore, the results of the violation were determined to be of very low safety significance and the violation was classified as a Severity Level IV Non-Cited Violation.

Inspection Report# : [2004012\(pdf\)](#)

G**Significance:** Dec 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50, Appendix B, Criterion XI, "Test Control." Failure to Have Adequate Test Procedures for the Testing of Safety-Related Switches

A Green finding associated with a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," was identified by the inspectors for the failure to establish and perform testing required to demonstrate that components will perform satisfactorily in service with written test procedures which incorporate applicable requirements and acceptance limits. The licensee performed post-maintenance testing of a component cooling water pump control switch, a safety-related component, without the use of a written test procedure which incorporated the applicable requirements and acceptance limits for testing to demonstrate the component would perform satisfactorily in service. The licensee's extent of condition identified the potential for at least 11 additional activities for which safety-related components did not have the appropriate test procedures established. At the end of the inspection period, the licensee developed actions to correct the identified deficiencies and to ensure licensee personnel were aware of the requirements to use procedures for the testing of safety-related components.

This issue was more than minor because if left uncorrected the finding could become a more significant safety concern. In addition, the finding affected the mitigating systems cornerstone attribute of procedure quality, specifically maintenance and testing (pre-event) procedures, and the cornerstone objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. In accordance with the Significance Determination Process, this finding was determined to be a Non-Cited Violation of very low safety significance because the finding was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18.

Inspection Report# : [2004012\(pdf\)](#)**G****Significance:** Nov 19, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Ensure That a Safe Shutdown Procedure Directed Alignment of Instrumentation to a Direct Current Bus with a Battery Charger

A finding of very low safety significance was identified by the inspectors for failure to align safe shutdown instrumentation to an electrical bus with a battery charger in procedure AOP-10A, "Safe Shutdown - Local Control." Specifically, the procedure aligned Units 1 and 2 safe shutdown instrumentation to a 125Vdc bus that did not have a battery charger available to support the selected instrumentation.

This issue was more than minor because it affected the procedure quality attribute of the Reactor Safety Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. Specifically, the safe shutdown instrumentation associated with this bus, without a battery charger, could potentially become inoperable as the voltage of the battery supplying the bus decreased. Operators could select another bus with a safe shutdown inverter, however, the procedure did not direct this action. To correct this procedural error, the licensee issued Temporary Change Notice 2004-0762. This issue was entered into the licensee's corrective action program as CAP059262 and CE014635. The issue was of very low safety significance because it did not represent an actual loss of a safety function. The issue was a Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instruction, Procedures, and Drawings," for failure to provide a procedure of a type appropriate to the circumstances.

Inspection Report# : [2004010\(pdf\)](#)**G****Significance:** Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Vendor Breaker Testing Requirements Not Incorporated in Procedure

The inspectors identified a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," because the licensee did not evaluate a Technical Bulletin issued by Westinghouse in March 2004 regarding safety-related breakers and incorporate the testing instructions specified in the Bulletin into the applicable station procedures.

The finding was greater than minor because it was associated with the procedure quality attribute of the Reactor Safety Mitigating Systems cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low significance as it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program. As part of corrective actions, the licensee evaluated the Technical Bulletin and incorporated the testing instructions into applicable station procedures.

Inspection Report# : [2004008\(pdf\)](#)**G****Significance:** Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective Actions for a Part 21 Notification on Diesel Governors Were Not Timely

The inspectors identified a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," because the licensee failed to promptly evaluate and resolve a 10 CFR Part 21 issue from 2001 involving the governors on all four emergency diesel generators (EDGs). The

Part 21 issue pertained to the service life of electrolytic capacitors in the governor control system of all four safety-related EDGs. The capacitors in the four EDGs were beyond the service life specified by the vendor in the Part 21 and, in three of four EDGs, the capacitors were beyond the industry's slightly longer replacement interval.

The finding is greater than minor because it was associated with the equipment performance attribute of the Reactor Safety Mitigating Systems cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems (the EDGs) that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance because it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program and evaluated a recent industry study that indicated a slightly greater service life of the capacitors. In addition, the licensee has made plans to replace the capacitors on an accelerated schedule.

Inspection Report# : [2004008\(pdf\)](#)

G

Significance: Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement a Molded-Case Circuit Breaker Test Program

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," because the licensee failed to implement a program to assure that the installed molded-case circuit breakers (MCCBs) will perform satisfactorily in service.

The finding was greater than minor because it was associated with the Reactor Safety Mitigating Systems cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the availability, reliability, capability of systems that responds to initiating events to prevent undesirable consequences (i.e., core damage). Molded-case circuit breakers provide for breaker coordination, over-current protection, fire prevention, and multiple other safety-related functions. The finding is of very low safety significance because it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program. As part of its corrective actions, the licensee planned to institute an exercising and testing program for safety-related MCCBs.

Inspection Report# : [2004008\(pdf\)](#)

G

Significance: Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Untimely Identification of Overfilled Safety Injection Accumulator

A finding of very low safety significance was identified by the inspectors for a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action." The licensee had indications in mid-February 2004 that the water level in a Unit 2 safety injection accumulator was high offscale, a significant condition adverse to quality, but the indications were not verified until about 1½ months later. In addition, the licensee did not evaluate why the issue took 1½ months to resolve.

The finding is greater than minor because it was associated with the human performance attribute of the Reactor Safety Mitigating Systems cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems (the safety injection system) that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance because it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. As corrective action, the licensee implemented a procedure to ensure that decision-making for future significant equipment problems was conducted in a systematic, well-thought out manner.

Inspection Report# : [2004008\(pdf\)](#)

G

Significance: Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Vendor Torque Values Not Listed in Procedure

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," having very low safety significance. Specifically, the licensee failed to incorporate the vendor's torque requirements for breaker arc chute fasteners into station procedures.

The finding is greater than minor because it was associated with the procedure quality attribute of the Reactor Safety Mitigating System cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance because it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program and revised the procedure to include the vendor's torque requirements.

Inspection Report# : [2004008\(pdf\)](#)

G

Significance: Jul 16, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Test Service Water Headers

The inspectors identified a Non-Cited Violation of 10 CFR 50.55a(g)(4) and 10 CFR 50.55a(g)(5)(iv) associated with failure to perform testing of the buried service water header piping in accordance with the American Society of Mechanical Engineers Code Section XI requirements. The licensee's corrective actions included verifying that quarterly system flow tests provided basis for service water header operability.

This finding was more than minor because it affected the Mitigating Systems Cornerstone objective of equipment reliability and if left uncorrected, could have allowed undetected through-wall flaws to develop in the header piping. These flaws could then continue to grow in size until leakage from the buried headers degraded system operation or if sufficient general corrosion occurs, a gross rupture or collapse of the piping sections could occur. The finding is of very low safety significance and screened as Green using the Significance Determination Process Phase 1 screening worksheet.

Inspection Report# : [2004004\(pdf\)](#)

G

Significance: Jul 16, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Correctly Translate Condensate Storage Tank Temperature Limits into Procedures and Instructions

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," in that the design bases for the maximum Condensate Storage Tank (CST) temperature was not correctly translated into procedures and instructions. Specifically, the Main Steam Line Break (MSLB) Containment Integrity Analysis assumed a maximum value of 100 degrees Fahrenheit for the temperature of the water in the CST, while operations procedures allowed a maximum of 120 degrees Fahrenheit for the CST temperature. This finding applies to both units. The licensee's corrective actions included procedural changes to reflect the correct temperature limit.

This finding was more than minor because an evaluation was required to ensure that accident analysis requirements were met, since the CST was heated up to greater than the maximum analysis value of 100 degrees Fahrenheit during unit startup/shutdown operations with the CST aligned to the operating unit. The finding is of very low safety significance and screened as Green using the Significance Determination Process Phase 1 screening worksheet.

Inspection Report# : [2004004\(pdf\)](#)

G

Significance: Jul 16, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Periodically Verify Position of Valves in the Service Water (SW) System

The inspectors identified a Non-Cited Violation of Technical Specification Surveillance Requirements SR 3.7.8.1 and SR 3.6.3.2 associated with the periodic verification of the position of valves and flanges in the SW system flow paths servicing safety related equipment and in lines associated with containment isolation. Specifically, the licensee did not verify that approximately 100 valves in the SW system flow path servicing safety related equipment that were not locked, sealed, or otherwise secured in position, were in the correct position every 31 days while the Units were in Mode 1, 2, 3, or 4. In addition, the licensee did not verify that 12 containment isolation manual valves were closed and two pipe fittings associated with containment isolation were in place every 31 days while the Units were in Mode 1, 2, 3, or 4. This finding applies to both units. The licensee's corrective actions included locking the appropriate valves and procedural changes.

This finding was more than minor because it was, for the most part, associated with the Mitigating Systems attribute of Configuration Control, which affected the Mitigating Systems Cornerstone objective of ensuring the availability and reliability of the SW system to respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance and screened as Green using the Significance Determination Process Phase 1 screening worksheet.

Inspection Report# : [2004004\(pdf\)](#)

G

Significance: Jul 16, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Translate Original Design Requirements for the 480-Volt Alternating Current (Vac) System

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to adequately translate original design requirements for the 480 Vac system into specifications during procurement of new and replacement equipment. The original specifications for equipment such as motors and cables identified the intended service as suitable for a 480 Vac ungrounded system. Specifications for replacement motors did not specify the intended service as an ungrounded system. The licensee's corrective actions included a verification that the identified equipment that did not specify use in a 480 Vac ungrounded system could withstand the overvoltage conditions that can occur on ungrounded systems.

This finding was more than minor because it involved the design control attribute of the Mitigating Systems cornerstone and affected the objective of ensuring the capability of the safety related 480 Vac system in response to initiating events to prevent undesirable consequences. Specifically, the failure to specify the correct service conditions may have resulted in motors being supplied without the enhanced insulation systems required to withstand the overvoltage conditions that can occur on ungrounded systems when a single line to ground occurs. The

finding is of very low safety significance and screened as Green using the Significance Determination Process Phase 1 screening worksheet.
Inspection Report# : [2004004\(pdf\)](#)

G

Significance: Jun 30, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Safety Injection System Accumulator Operated With Fluid Level Above Technical Specification Surveillance Requirement Limits

A Non-Cited Violation of Technical Specification (TS) Surveillance Requirement (SR) 3.5.1.2 was self-revealed when the water volume in the Unit 2 safety injection (SI) accumulator, 2T-34A, exceeded the TS limit of 1136 cubic feet.

The finding is greater than minor because it affected the Reactor Safety Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events. The finding was considered to be of very low safety significance since: (1) the Nuclear Steam Supply System vendor performed an analysis of the over-filled, as-found condition and determined that the 2T-34A accumulator had been capable of performing the design basis function and would not have challenged the 10 CFR 50.46 Loss-of-Coolant-Accident acceptance criteria, and (2) the finding did not result in a design or qualification deficiency, an actual loss of safety function, or involve internal or external initiating events. The licensee has entered this finding into its corrective action program.

Inspection Report# : [2004003\(pdf\)](#)

G

Significance: Mar 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Sprinkler Head Locations Not in Accordance with Fire Code

The inspectors identified a Non-Cited Violation of the license for the failure of the licensee to install sprinkler heads in accordance with the applicable fire code in the component cooling water pump area. Specifically, the sprinkler heads were located a greater distance below the ceiling than permitted by code.

This finding was more than minor because it was associated with the protection against external factors (i.e., fire) attribute of the mitigating systems reactor safety cornerstone and affected the cornerstone objective in that a fire protection feature (i.e., an automatic suppression system) was adversely affected. The finding was of very low safety significance because manual fire fighting and auxiliary feedwater could be credited. This issue is a violation of a license condition and the applicable fire code which requires that sprinkler heads be located near the ceiling.

Inspection Report# : [2004002\(pdf\)](#)

R

Significance: Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

Apparent violation of 10 CFR Part 50, Appendix B, Criterion III, for the failure to establish the appropriate design control measures for the installation of orifices to the AFW recirculation lines

An apparent violation was identified, in part, through a self-revealing event when decreased auxiliary feedwater pump recirculation flow was noted during post-maintenance testing. Subsequent licensee and NRC review of the event determined that the licensee had installed incorrectly designed orifices in each of the pump recirculation lines. The orifices, due to small clearances, were susceptible to plugging. The primary causes of this finding were inadequacies in the licensee's design process and the licensee's implementation of the process, including the identification of system design requirements and the development of supporting safety evaluations.

The issue has been preliminarily determined to have high safety significance (Red). Following installation of the inadequately designed orifices, the entire auxiliary feedwater system was susceptible to a common mode failure during operations using service water. Failure of auxiliary feedwater during several initiating events could lead to core damage. The installation of the incorrectly designed orifices in the recirculation lines is an apparent violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

On December 11, 2003, the final significance determination letter was issued for this finding. It was determined that this is a RED finding for Unit 2 and a YELLOW finding for Unit 1. For tracking purposes, identical findings were opened for Unit 1 (designated as YELLOW) and Unit 2 (designated as RED).

Inspection Report# : [2002015\(pdf\)](#)

Significance: N/A Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

The failure to identify the root cause and implement corrective actions for the AFW/IA issue, a significant condition adverse to quality, so as to prevent recurrence.

A violation was identified for the licensee's failure to implement adequate corrective actions to effectively address a previous Red finding and preclude recurrence (Inspection Report 50-266/01-17; 50-301/01-17). Specifically, the licensee failed to identify potential common mode failures that existed involving power supplies to the recirculation line air-operated valve and other system components. In addition, the licensee's corrective actions for the potential common mode failure associated with a loss of instrument air did not preclude repetition. Specifically, the licensee's corrective actions, to upgrade the safety function of the air-operated recirculation valve, failed to ensure that

successful operation of the recirculation line air-operated valve was dependent only on safety-related support systems. Following the corrective actions, successful operation of the valve was still dependent upon nonsafety-related power to an interposing relay. Additionally, the corrective actions failed to discover a single failure mechanism involving a system orifice modification.

The issue was more than minor because the failure to implement appropriate corrective actions resulted in the auxiliary feedwater system continuing to rely on nonsafety-related support systems and to be susceptible to a single event causing a total system failure. The failure of nonsafety-related support systems and single event failures are an expected condition during several design basis accidents and should not cause a safety system to fail. The failure of the licensee to implement adequate corrective actions is a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action."

This violation is associated with a previously identified RED finding (IR 50-266;50-30/01-17).
Inspection Report# : [2002015\(pdf\)](#)



Significance: Feb 28, 2002

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002.

Inspection Report 50-266/02-15; 50-301/02-15, issued April 2, 2003, documented the NRC decision that this finding is not an Old Design Issue.

Inspection Report# : [2001017\(pdf\)](#)

Inspection Report# : [2003003\(pdf\)](#)

Barrier Integrity

Emergency Preparedness



Significance: Mar 31, 2004

Identified By: NRC

Item Type: FIN Finding

Steam Generator Narrow Range Level Setpoints Revised in Safety-Related Procedures but Not in Emergency Plan General Emergency EAL 3.1.1.4

The inspectors identified a finding of very low safety significance concerning an inadequate extent-of-condition review during safety-related procedure revisions associated with steam generator narrow range level setpoints, and the failure to recognize the impact of the setpoint changes on the Point Beach Emergency Plan. The primary cause of this finding was related to the cross-cutting area of human performance in four respects. First, at least four personnel, including a Shift Manager and two senior reactor operators, reviewed the procedure changes but failed to recognize the potential impact of the procedure changes on the emergency plan. Second, personnel associated with the corrective action process for the initial steam generator narrow range level density compensation issue failed to recognize the potential emergency plan impact and raise the issue to the attention of emergency preparedness personnel. Third, despite the emergency preparedness reviews completed prior to and during the 95003 supplemental inspection process, the licensee had not identified and evaluated the potential impacts of the discrepancy between the procedure setpoints and Emergency Action Level 3.1.1.4. Fourth, until identified by the inspectors, personnel involved with efforts to achieve regulatory compliance with eight emergency action levels during January 2004, had not recognized or evaluated the potential impact of the discrepancy.

This finding was considered more than minor because it: (1) involved the procedure quality attribute of the emergency preparedness reactor safety cornerstone; and (2) if left uncorrected, it could become a more significant safety concern if the discrepancy in steam generator narrow

range level setpoints prevented, or caused a delay in, declaring a general emergency during a loss of electrical power event. The finding was not considered a violation of regulatory requirements.

Inspection Report# : [2004002\(pdf\)](#)

Significance: SL-III Dec 16, 2003

Identified By: NRC

Item Type: VIO Violation

10 CFR 50.54, 10 CFR 50.47 apparent violation for failure to maintain a standard scheme of emergency action levels

The inspectors identified an apparent violation of 10 CFR 50.54(q), associated with emergency planning standard 10 CFR 50.47(b)(4), which will be subject to the NRC traditional enforcement process not the revised Reactor Oversight Process. Specifically, the licensee failed to maintain a standard scheme of emergency action levels (EALs). Eight EALs were changed in 1998 and 1999. The changes decreased the effectiveness of the Emergency Plan in that emergency conditions that would have resulted in classifications at the General Emergency (GE), Alert, and Notification of Unusual Event (NOUE) levels would result in a lesser classification under the current EAL scheme. Approval of the NRC was not obtained prior to the changes being made. Since the identification of the issue by the inspectors, the licensee has revised the eight EALs to be equivalent with those approved by the NRC in 1984.

In a letter dated March 17, 2004, a Notice of Violation and Proposed Imposition of Civil Penalty - \$60,000, was issued.

Inspection Report# : [2003007\(pdf\)](#)

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

Last modified : March 09, 2005

Point Beach 2

1Q/2005 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Mar 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Emergency Diesel Generator Fuel Oil Filters in Duplex

A Green finding associated with a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified by the inspectors for the failure to take corrective actions for a condition adverse to quality. The inspectors noted that in March 2003, corrective action program document CAP031641 was written to assess the licensee's operational practice of having the two fuel oil duplex strainers on each of the four emergency diesel generators set to dual filter mode instead of single mode. The assessment concluded that the optimal position was single mode because it allowed changing the filter elements with the emergency diesel generator running. The dual filter mode required the emergency diesel generator to be stopped to change the filters. In January 2004, CAP031641 was closed with no actions taken to address this condition adverse to quality.

The inspectors also determined that the primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to take any corrective actions to correct this condition adverse to quality.

This issue was more than minor because if left uncorrected the finding could become a more significant safety concern. In addition, the finding affected the Mitigating Systems cornerstone attributes of configuration control and equipment performance. The inspectors evaluated the finding using NRC Inspection Manual Chapter IMC 0609, Appendix A, Phase 1 screening for the Mitigating Systems cornerstone and determined that the finding was of very low safety significance because it was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18.

Inspection Report# : [2005003\(pdf\)](#)

Significance:  Feb 27, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedure Delays Return of Battery Charger

A finding of very low safety significance was self-revealed for a violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an Abnormal Operating Procedure (AOP) that was not adequate for returning safety-related battery chargers to an operable status. Specifically, on February 27, 2005, an offsite line experienced a fault and became disconnected, causing a momentary phase-to-phase short and then a continuous open circuit. The transient caused a loss of power to all in-service safety-related battery chargers. Three of the four chargers were restored using the AOP, but one battery charger could not be promptly restored to service because the AOP was inadequate. The licensee took prompt action to enter the item into the corrective action process and change the procedure.

The inspectors concluded that the finding was more than minor because if left uncorrected the item could become a more significant safety concern, and it was associated with the procedure quality attribute of the Mitigating Systems cornerstone. The finding was considered to be of very low safety significance since the finding did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event.

Inspection Report# : [2005003\(pdf\)](#)

Significance:  Feb 16, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Air Leak On AFW Recirculation Flow Control Valve

A finding of very low safety significance associated with a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings" was identified by the inspectors. The finding was associated with an air leak that inspectors found on an air supply fitting to the minimum flow recirculation control valve for the Unit 2 turbine-driven auxiliary feedwater (TDAFW) pump. The licensee determined that the leak most likely resulted when a fitting was inadvertently loosened during maintenance. Post-maintenance testing did not detect the loose fitting. Following discovery of the leak by the inspectors 6 days after the maintenance, the licensee entered the issue into its

corrective action program, declared the TDAFW pump for Unit 2 inoperable, and repaired the leak.

The inspectors determined that the primary cause of this finding was related to the cross-cutting area of human performance, because the licensee failed to ensure that post-maintenance testing was adequately conducted for the component.

This issue is more than minor because it impacted the operability of a component in the Mitigating Systems cornerstone and affected the objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was screened through the Phase II screening in the Significance Determination Process (SDP) of Inspection Manual Chapter (IMC) 0609, Appendix A, "Determining the Significance of Reactor Inspection Findings for At Power Situations," since the component was impacted for greater than the Limiting Condition for Operation. The findings was determine to be of very low safety significance based on the review. This finding was a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings."

Inspection Report# : [2005003\(pdf\)](#)

G

Significance: Dec 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50, Appendix B, Criterion XVI, "Corrective Action." Failure to Take Corrective Actions for a Condition Adverse to Quality

A finding of very low safety significance was identified by the inspectors for a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to take actions for a condition adverse to quality. Specifically, in September 2003 a condition report was written to address the susceptibility of fouling of a small mesh strainer installed in a fire protection line which provided emergency cooling to the turbine driven auxiliary feedwater pumps and turbine bearing coolers. The condition report also identified that procedure guidance did not exist for operators to utilize an existing flush valve on the strainer if the strainer became clogged during use. The inspectors identified that in August 2004, the condition report was closed with no actions taken to address this condition adverse to quality. At the end of the inspection, the licensee took corrective actions to ensure that as a minimum, the appropriate procedural guidance existed if the strainer became clogged during use.

The inspectors also concluded the primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to take any corrective actions to correct this condition adverse to quality.

This finding was more than minor because if left uncorrected the finding could become a more significant safety concern. In addition, the finding affected the mitigating systems cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. In accordance with the Significance Determination Process, this finding was determined to be a Non-Cited Violation of very low safety significance because it was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18.

Inspection Report# : [2004012\(pdf\)](#)

Significance: SL-IV Dec 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a Safety Evaluation as Required by 10 CFR 50.59, "Changes, Tests and Experiments"

The inspectors identified a Severity Level IV Non-Cited Violation of 10 CFR 50.59(d)(1) for the licensee's failure to perform a safety evaluation for changes made to the Final Safety Analysis Report. Specifically, the licensee 'screened out' a change to the Final Safety Analysis Report which modified operator response times for the Steam Generator Tube Rupture Chapter 14 Accident Analysis contained in the Final Safety Analysis Report. Specifically, a time requirement for equalizing primary and secondary pressure was removed from the Final Safety Analysis Report. In addition, the licensee changed the time in which isolation of the affected Steam Generator could be achieved from 10 minutes to 30 minutes. At the end of the inspection period the licensee initiated a corrective action to perform a safety evaluation in accordance with 10 CFR 50.59 for this Final Safety Analysis Report change.

Because the Significance Determination Process is not designed to assess the significance of violations that potentially impact or impede the regulatory process, this issue was dispositioned using the traditional enforcement process in accordance with Section IV of the NRC Enforcement Policy. However, the results of the violation were assessed using the Significance Determination Process.

This finding was determined to be more than minor because the inspectors could not reasonably determine that the change would not ultimately require NRC approval. The inspectors determined that even though the change was not adequately evaluated in accordance with 10 CFR 50.59, this violation was of very low safety significance because the design basis safety-related functions of mitigating systems to respond to this initiating event scenario were not adversely affected. The inspectors evaluated the results of the finding using the Significance Determination Process for the mitigating systems cornerstone. The inspectors determined that the results of the finding were of very low safety significance because the finding was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18. Therefore, the results of the violation were determined to be of very low safety significance and the violation was classified as a Severity Level IV Non-Cited Violation.

Inspection Report# : [2004012\(pdf\)](#)

G**Significance:** Dec 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50, Appendix B, Criterion XI, "Test Control." Failure to Have Adequate Test Procedures for the Testing of Safety-Related Switches

A Green finding associated with a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," was identified by the inspectors for the failure to establish and perform testing required to demonstrate that components will perform satisfactorily in service with written test procedures which incorporate applicable requirements and acceptance limits. The licensee performed post-maintenance testing of a component cooling water pump control switch, a safety-related component, without the use of a written test procedure which incorporated the applicable requirements and acceptance limits for testing to demonstrate the component would perform satisfactorily in service. The licensee's extent of condition identified the potential for at least 11 additional activities for which safety-related components did not have the appropriate test procedures established. At the end of the inspection period, the licensee developed actions to correct the identified deficiencies and to ensure licensee personnel were aware of the requirements to use procedures for the testing of safety-related components.

This issue was more than minor because if left uncorrected the finding could become a more significant safety concern. In addition, the finding affected the mitigating systems cornerstone attribute of procedure quality, specifically maintenance and testing (pre-event) procedures, and the cornerstone objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. In accordance with the Significance Determination Process, this finding was determined to be a Non-Cited Violation of very low safety significance because the finding was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18.

Inspection Report# : [2004012\(pdf\)](#)**G****Significance:** Nov 19, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Ensure That a Safe Shutdown Procedure Directed Alignment of Instrumentation to a Direct Current Bus with a Battery Charger

A finding of very low safety significance was identified by the inspectors for failure to align safe shutdown instrumentation to an electrical bus with a battery charger in procedure AOP-10A, "Safe Shutdown - Local Control." Specifically, the procedure aligned Units 1 and 2 safe shutdown instrumentation to a 125Vdc bus that did not have a battery charger available to support the selected instrumentation.

This issue was more than minor because it affected the procedure quality attribute of the Reactor Safety Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. Specifically, the safe shutdown instrumentation associated with this bus, without a battery charger, could potentially become inoperable as the voltage of the battery supplying the bus decreased. Operators could select another bus with a safe shutdown inverter, however, the procedure did not direct this action. To correct this procedural error, the licensee issued Temporary Change Notice 2004-0762. This issue was entered into the licensee's corrective action program as CAP059262 and CE014635. The issue was of very low safety significance because it did not represent an actual loss of a safety function. The issue was a Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instruction, Procedures, and Drawings," for failure to provide a procedure of a type appropriate to the circumstances.

Inspection Report# : [2004010\(pdf\)](#)**G****Significance:** Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Vendor Breaker Testing Requirements Not Incorporated in Procedure

The inspectors identified a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," because the licensee did not evaluate a Technical Bulletin issued by Westinghouse in March 2004 regarding safety-related breakers and incorporate the testing instructions specified in the Bulletin into the applicable station procedures.

The finding was greater than minor because it was associated with the procedure quality attribute of the Reactor Safety Mitigating Systems cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low significance as it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program. As part of corrective actions, the licensee evaluated the Technical Bulletin and incorporated the testing instructions into applicable station procedures.

Inspection Report# : [2004008\(pdf\)](#)**G****Significance:** Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective Actions for a Part 21 Notification on Diesel Governors Were Not Timely

The inspectors identified a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," because the licensee failed to promptly evaluate and resolve a 10 CFR Part 21 issue from 2001 involving the governors on all four emergency diesel generators (EDGs). The

Part 21 issue pertained to the service life of electrolytic capacitors in the governor control system of all four safety-related EDGs. The capacitors in the four EDGs were beyond the service life specified by the vendor in the Part 21 and, in three of four EDGs, the capacitors were beyond the industry's slightly longer replacement interval.

The finding is greater than minor because it was associated with the equipment performance attribute of the Reactor Safety Mitigating Systems cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems (the EDGs) that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance because it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program and evaluated a recent industry study that indicated a slightly greater service life of the capacitors. In addition, the licensee has made plans to replace the capacitors on an accelerated schedule.

Inspection Report# : [2004008\(pdf\)](#)

Significance: Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement a Molded-Case Circuit Breaker Test Program

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," because the licensee failed to implement a program to assure that the installed molded-case circuit breakers (MCCBs) will perform satisfactorily in service.

The finding was greater than minor because it was associated with the Reactor Safety Mitigating Systems cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the availability, reliability, capability of systems that responds to initiating events to prevent undesirable consequences (i.e., core damage). Molded-case circuit breakers provide for breaker coordination, over-current protection, fire prevention, and multiple other safety-related functions. The finding is of very low safety significance because it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program. As part of its corrective actions, the licensee planned to institute an exercising and testing program for safety-related MCCBs.

Inspection Report# : [2004008\(pdf\)](#)

Significance: Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Untimely Identification of Overfilled Safety Injection Accumulator

A finding of very low safety significance was identified by the inspectors for a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action." The licensee had indications in mid-February 2004 that the water level in a Unit 2 safety injection accumulator was high offscale, a significant condition adverse to quality, but the indications were not verified until about 1½ months later. In addition, the licensee did not evaluate why the issue took 1½ months to resolve.

The finding is greater than minor because it was associated with the human performance attribute of the Reactor Safety Mitigating Systems cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems (the safety injection system) that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance because it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. As corrective action, the licensee implemented a procedure to ensure that decision-making for future significant equipment problems was conducted in a systematic, well-thought out manner.

Inspection Report# : [2004008\(pdf\)](#)

Significance: Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Vendor Torque Values Not Listed in Procedure

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," having very low safety significance. Specifically, the licensee failed to incorporate the vendor's torque requirements for breaker arc chute fasteners into station procedures.

The finding is greater than minor because it was associated with the procedure quality attribute of the Reactor Safety Mitigating System cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance because it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program and revised the procedure to include the vendor's torque requirements.

Inspection Report# : [2004008\(pdf\)](#)

Significance: Jul 16, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Test Service Water Headers

The inspectors identified a Non-Cited Violation of 10 CFR 50.55a(g)(4) and 10 CFR 50.55a(g)(5)(iv) associated with failure to perform testing of the buried service water header piping in accordance with the American Society of Mechanical Engineers Code Section XI requirements. The licensee's corrective actions included verifying that quarterly system flow tests provided basis for service water header operability.

This finding was more than minor because it affected the Mitigating Systems Cornerstone objective of equipment reliability and if left uncorrected, could have allowed undetected through-wall flaws to develop in the header piping. These flaws could then continue to grow in size until leakage from the buried headers degraded system operation or if sufficient general corrosion occurs, a gross rupture or collapse of the piping sections could occur. The finding is of very low safety significance and screened as Green using the Significance Determination Process Phase 1 screening worksheet.

Inspection Report# : [2004004\(pdf\)](#)

G

Significance: Jul 16, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Correctly Translate Condensate Storage Tank Temperature Limits into Procedures and Instructions

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," in that the design bases for the maximum Condensate Storage Tank (CST) temperature was not correctly translated into procedures and instructions. Specifically, the Main Steam Line Break (MSLB) Containment Integrity Analysis assumed a maximum value of 100 degrees Fahrenheit for the temperature of the water in the CST, while operations procedures allowed a maximum of 120 degrees Fahrenheit for the CST temperature. This finding applies to both units. The licensee's corrective actions included procedural changes to reflect the correct temperature limit.

This finding was more than minor because an evaluation was required to ensure that accident analysis requirements were met, since the CST was heated up to greater than the maximum analysis value of 100 degrees Fahrenheit during unit startup/shutdown operations with the CST aligned to the operating unit. The finding is of very low safety significance and screened as Green using the Significance Determination Process Phase 1 screening worksheet.

Inspection Report# : [2004004\(pdf\)](#)

G

Significance: Jul 16, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Periodically Verify Position of Valves in the Service Water (SW) System

The inspectors identified a Non-Cited Violation of Technical Specification Surveillance Requirements SR 3.7.8.1 and SR 3.6.3.2 associated with the periodic verification of the position of valves and flanges in the SW system flow paths servicing safety related equipment and in lines associated with containment isolation. Specifically, the licensee did not verify that approximately 100 valves in the SW system flow path servicing safety related equipment that were not locked, sealed, or otherwise secured in position, were in the correct position every 31 days while the Units were in Mode 1, 2, 3, or 4. In addition, the licensee did not verify that 12 containment isolation manual valves were closed and two pipe fittings associated with containment isolation were in place every 31 days while the Units were in Mode 1, 2, 3, or 4. This finding applies to both units. The licensee's corrective actions included locking the appropriate valves and procedural changes.

This finding was more than minor because it was, for the most part, associated with the Mitigating Systems attribute of Configuration Control, which affected the Mitigating Systems Cornerstone objective of ensuring the availability and reliability of the SW system to respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance and screened as Green using the Significance Determination Process Phase 1 screening worksheet.

Inspection Report# : [2004004\(pdf\)](#)

G

Significance: Jul 16, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Translate Original Design Requirements for the 480-Volt Alternating Current (Vac) System

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to adequately translate original design requirements for the 480 Vac system into specifications during procurement of new and replacement equipment. The original specifications for equipment such as motors and cables identified the intended service as suitable for a 480 Vac ungrounded system. Specifications for replacement motors did not specify the intended service as an ungrounded system. The licensee's corrective actions included a verification that the identified equipment that did not specify use in a 480 Vac ungrounded system could withstand the overvoltage conditions that can occur on ungrounded systems.

This finding was more than minor because it involved the design control attribute of the Mitigating Systems cornerstone and affected the objective of ensuring the capability of the safety related 480 Vac system in response to initiating events to prevent undesirable consequences. Specifically, the failure to specify the correct service conditions may have resulted in motors being supplied without the enhanced insulation systems required to withstand the overvoltage conditions that can occur on ungrounded systems when a single line to ground occurs. The

finding is of very low safety significance and screened as Green using the Significance Determination Process Phase 1 screening worksheet.
Inspection Report# : [2004004\(pdf\)](#)

G

Significance: Jun 30, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Safety Injection System Accumulator Operated With Fluid Level Above Technical Specification Surveillance Requirement Limits

A Non-Cited Violation of Technical Specification (TS) Surveillance Requirement (SR) 3.5.1.2 was self-revealed when the water volume in the Unit 2 safety injection (SI) accumulator, 2T-34A, exceeded the TS limit of 1136 cubic feet.

The finding is greater than minor because it affected the Reactor Safety Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events. The finding was considered to be of very low safety significance since: (1) the Nuclear Steam Supply System vendor performed an analysis of the over-filled, as-found condition and determined that the 2T-34A accumulator had been capable of performing the design basis function and would not have challenged the 10 CFR 50.46 Loss-of-Coolant-Accident acceptance criteria, and (2) the finding did not result in a design or qualification deficiency, an actual loss of safety function, or involve internal or external initiating events. The licensee has entered this finding into its corrective action program.

Inspection Report# : [2004003\(pdf\)](#)

R

Significance: Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

Apparent violation of 10 CFR Part 50, Appendix B, Criterion III, for the failure to establish the appropriate design control measures for the installation of orifices to the AFW recirculation lines

An apparent violation was identified, in part, through a self-revealing event when decreased auxiliary feedwater pump recirculation flow was noted during post-maintenance testing. Subsequent licensee and NRC review of the event determined that the licensee had installed incorrectly designed orifices in each of the pump recirculation lines. The orifices, due to small clearances, were susceptible to plugging. The primary causes of this finding were inadequacies in the licensee's design process and the licensee's implementation of the process, including the identification of system design requirements and the development of supporting safety evaluations.

The issue has been preliminarily determined to have high safety significance (Red). Following installation of the inadequately designed orifices, the entire auxiliary feedwater system was susceptible to a common mode failure during operations using service water. Failure of auxiliary feedwater during several initiating events could lead to core damage. The installation of the incorrectly designed orifices in the recirculation lines is an apparent violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

On December 11, 2003, the final significance determination letter was issued for this finding. It was determined that this is a RED finding for Unit 2 and a YELLOW finding for Unit 1. For tracking purposes, identical findings were opened for Unit 1 (designated as YELLOW) and Unit 2 (designated as RED).

Inspection Report# : [2002015\(pdf\)](#)

Significance: N/A Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

The failure to identify the root cause and implement corrective actions for the AFW/IA issue, a significant condition adverse to quality, so as to prevent recurrence.

A violation was identified for the licensee's failure to implement adequate corrective actions to effectively address a previous Red finding and preclude recurrence (Inspection Report 50-266/01-17; 50-301/01-17). Specifically, the licensee failed to identify potential common mode failures that existed involving power supplies to the recirculation line air-operated valve and other system components. In addition, the licensee's corrective actions for the potential common mode failure associated with a loss of instrument air did not preclude repetition. Specifically, the licensee's corrective actions, to upgrade the safety function of the air-operated recirculation valve, failed to ensure that successful operation of the recirculation line air-operated valve was dependent only on safety-related support systems. Following the corrective actions, successful operation of the valve was still dependent upon nonsafety-related power to an interposing relay. Additionally, the corrective actions failed to discover a single failure mechanism involving a system orifice modification.

The issue was more than minor because the failure to implement appropriate corrective actions resulted in the auxiliary feedwater system continuing to rely on nonsafety-related support systems and to be susceptible to a single event causing a total system failure. The failure of nonsafety-related support systems and single event failures are an expected condition during several design basis accidents and should not cause a safety system to fail. The failure of the licensee to implement adequate corrective actions is a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action."

This violation is associated with a previously identified RED finding (IR 50-266;50-30/01-17).

Inspection Report# : [2002015\(pdf\)](#)

R

Significance: Feb 28, 2002

Identified By: Licensee
Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002.

Inspection Report 50-266/02-15; 50-301/02-15, issued April 2, 2003, documented the NRC decision that this finding is not an Old Design Issue.

Inspection Report# : [2001017\(pdf\)](#)

Inspection Report# : [2003003\(pdf\)](#)

Barrier Integrity

Emergency Preparedness

Significance: SL-III Dec 16, 2003

Identified By: NRC

Item Type: VIO Violation

10 CFR 50.54, 10 CFR 50.47 apparent violation for failure to maintain a standard scheme of emergency action levels

The inspectors identified an apparent violation of 10 CFR 50.54(q), associated with emergency planning standard 10 CFR 50.47(b)(4), which will be subject to the NRC traditional enforcement process not the revised Reactor Oversight Process. Specifically, the licensee failed to maintain a standard scheme of emergency action levels (EALs). Eight EALs were changed in 1998 and 1999. The changes decreased the effectiveness of the Emergency Plan in that emergency conditions that would have resulted in classifications at the General Emergency (GE), Alert, and Notification of Unusual Event (NOUE) levels would result in a lesser classification under the current EAL scheme. Approval of the NRC was not obtained prior to the changes being made. Since the identification of the issue by the inspectors, the licensee has revised the eight EALs to be equivalent with those approved by the NRC in 1984.

In a letter dated March 17, 2004, a Notice of Violation and Proposed Imposition of Civil Penalty - \$60,000, was issued.

Inspection Report# : [2003007\(pdf\)](#)

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

Last modified : June 17, 2005

Point Beach 2

2Q/2005 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Jun 30, 2005

Identified By: NRC

Item Type: FIN Finding

Adverse Trend of Failure to Ensure Causal Evaluations for Conditions Adverse to Quality for which Operability Recommendations were Performed

The inspectors identified a finding of very low significance (Green) for an adverse trend of failures to perform causal evaluations for conditions adverse to quality which only received operability recommendations, to ensure the cause of the conditions were identified and corrected. The licensee further evaluated the issue and corroborated the adverse trend, and in addition identified the issue potentially extended to condition reports documenting conditions adverse to quality with only maintenance rule evaluations performed. No violation of NRC requirements occurred.

The inspectors also determined that the primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution, because the licensee failed to perform causal evaluations commensurate with the significance of the condition reports to ensure the conditions adverse to quality were identified and corrected.

The issue was more than minor because the underlying issues associated with the finding were associated with the equipment performance and design control attributes of the Mitigating Systems cornerstone and adversely impacted the cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix A, Phase 1 screening for the Mitigating Systems cornerstone and determined the finding was of very low significance. The licensee took action to enter the item into the corrective action process and develop interim corrective actions. At the end of the inspection period, the licensee had not completed the evaluation of the finding.

Inspection Report# : [2005004\(pdf\)](#)

Significance:  Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadvertent Loss of Decay Heat Removal Capability

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the failure to verify the appropriate residual heat removal (RHR) system lineup prior to the issuance of a tagging order. As a result, upon implementation of the tagging order, the licensee also failed to maintain cooling for the Unit 2 reactor coolant system (RCS) in accordance with licensee procedures. Specifically, on April 19, 2005, the licensee performed a tagout on the 'B' train of safety injection while the 'B' RHR heat exchanger was in service and inadvertently isolated flow through the 'B' RHR heat exchanger, causing a loss of RHR for approximately 40 minutes.

The inspectors determined that a primary cause of this finding was related to the cross-cutting area of Human Performance, because the licensee failed to verify the appropriate conditions were established for implementation of the tagout.

The issue was more than minor because the finding was associated with the configuration control attribute of the Mitigating Systems cornerstone and adversely impacted the cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix G, Phase 1 Screening, Checklist 4, "Pressurized Water Reactor (PWR) Refueling Operations: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," specifically, Section I.C, "Core Heat Removal Guidelines - Equipment," was applicable to this finding. The finding affected the RHR loop which was operable and in operation; however, the finding did not meet the requirements for a Phase 2 or Phase 3 analysis per Appendix G. Therefore the finding was determined to be of very low significance. The licensee took prompt action to enter the item into the corrective action process, develop and implement interim corrective actions and evaluate the issues to develop additional corrective actions.

Inspection Report# : [2005004\(pdf\)](#)

G**Significance:** Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadvertent Refueling Water Storage Tank Inventory Loss

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed when an inadvertent inventory loss from the Unit 2 refueling water storage tank occurred. The inventory loss occurred when licensee personnel performed two procedures concurrently, which was not appropriate to the circumstances due to the equipment configuration conflicts created by performing the test procedures in this manner.

The inspectors determined that the primary cause of this finding was related to the cross-cutting area of Human Performance, because the licensee failed to appropriately validate and verify the procedures could be performed concurrently.

The issue was more than minor because the finding was associated with the configuration control and procedure quality attributes of the Mitigating Systems cornerstone and adversely impacted the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent core damage. The inspectors evaluated the finding using IMC 0609, Appendix G, Phase 1 Screening, Checklist 4, "PWR Refueling Operations: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," specifically Section II.C, "Inventory Control Guidelines-Equipment," was applicable to this finding. The inspectors determined the finding affected equipment necessary for makeup to the refueling cavity; however, the finding did not meet the requirements for a Phase 2 or Phase 3 analysis per Appendix G. Therefore the finding was determined to be of very low significance. The licensee took prompt action to enter the item into the corrective action process, evaluate the issues and develop corrective actions to address the causes of this finding.

Inspection Report# : [2005004\(pdf\)](#)G**Significance:** Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Multiple Design Calculation Errors of very Low Safety Significance

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors. Specifically, the licensee failed to apply design control measures to verify the adequacy of the design for the head assembly upgrade package (HAUP) associated with the replacement reactor vessel closure head. Specifically, design calculations that support the HAUP design basis contained errors, including the failure to specify the American Institute of Steel Construction (AISC) or American Society of Mechanical Engineers Boiler and Pressure Vessel Code minimum fillet weld size requirements, the failure to transform bolt design loads into the analysis bolt pattern coordinate system, and the failure to evaluate the control rod drive mechanism cooling duct as a slender component in accordance with Appendix B5 of the AISC design code.

The finding was more than minor because if left uncorrected the finding could become a more significant safety concern. Specifically, failure to specify the AISC or American Society of Mechanical Engineers Code required minimum fillet weld size, or failure to transform bolt design loads into the analysis bolt pattern coordinate system, or failure to evaluate slender section components in accordance with AISC Appendix B5 in similar design calculations could result in modifications that exceed licensing basis design acceptance limits. The finding was of very low safety significance because the calculation errors in these instances did not result in an HAUP structure or component to exceed its design basis acceptance limit. The licensee took prompt action to enter the item into the corrective action process, evaluate the issues and develop corrective actions to address the causes of this finding.

Inspection Report# : [2005004\(pdf\)](#)G**Significance:** Mar 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Emergency Diesel Generator Fuel Oil Filters in Duplex

A Green finding associated with a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified by the inspectors for the failure to take corrective actions for a condition adverse to quality. The inspectors noted that in March 2003, corrective action program document CAP031641 was written to assess the licensee's operational practice of having the two fuel oil duplex strainers on each of the four emergency diesel generators set to dual filter mode instead of single mode. The assessment concluded that the optimal position was single mode because it allowed changing the filter elements with the emergency diesel generator running. The dual filter mode required the emergency diesel generator to be stopped to change the filters. In January 2004, CAP031641 was closed with no actions taken to address this condition adverse to quality.

The inspectors also determined that the primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to take any corrective actions to correct this condition adverse to quality.

This issue was more than minor because if left uncorrected the finding could become a more significant safety concern. In addition, the finding affected the Mitigating Systems cornerstone attributes of configuration control and equipment performance. The inspectors evaluated the finding using NRC Inspection Manual Chapter IMC 0609, Appendix A, Phase 1 screening for the Mitigating Systems cornerstone and determined that the finding was of very low safety significance because it was not a design or qualification deficiency that was confirmed to

result in a loss of function per Generic Letter 91-18.

Inspection Report# : [2005003\(pdf\)](#)

G

Significance: Feb 27, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedure Delays Return of Battery Charger

A finding of very low safety significance was self-revealed for a violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an Abnormal Operating Procedure (AOP) that was not adequate for returning safety-related battery chargers to an operable status. Specifically, on February 27, 2005, an offsite line experienced a fault and became disconnected, causing a momentary phase-to-phase short and then a continuous open circuit. The transient caused a loss of power to all in-service safety-related battery chargers. Three of the four chargers were restored using the AOP, but one battery charger could not be promptly restored to service because the AOP was inadequate. The licensee took prompt action to enter the item into the corrective action process and change the procedure.

The inspectors concluded that the finding was more than minor because if left uncorrected the item could become a more significant safety concern, and it was associated with the procedure quality attribute of the Mitigating Systems cornerstone. The finding was considered to be of very low safety significance since the finding did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event.

Inspection Report# : [2005003\(pdf\)](#)

G

Significance: Feb 16, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Air Leak On AFW Recirculation Flow Control Valve

A finding of very low safety significance associated with a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings" was identified by the inspectors. The finding was associated with an air leak that inspectors found on an air supply fitting to the minimum flow recirculation control valve for the Unit 2 turbine-driven auxiliary feedwater (TDAFW) pump. The licensee determined that the leak most likely resulted when a fitting was inadvertently loosened during maintenance. Post-maintenance testing did not detect the loose fitting. Following discovery of the leak by the inspectors 6 days after the maintenance, the licensee entered the issue into its corrective action program, declared the TDAFW pump for Unit 2 inoperable, and repaired the leak.

The inspectors determined that the primary cause of this finding was related to the cross-cutting area of human performance, because the licensee failed to ensure that post-maintenance testing was adequately conducted for the component.

This issue is more than minor because it impacted the operability of a component in the Mitigating Systems cornerstone and affected the objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was screened through the Phase II screening in the Significance Determination Process (SDP) of Inspection Manual Chapter (IMC) 0609, Appendix A, "Determining the Significance of Reactor Inspection Findings for At Power Situations," since the component was impacted for greater than the Limiting Condition for Operation. The findings was determine to be of very low safety significance based on the review. This finding was a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings."

Inspection Report# : [2005003\(pdf\)](#)

G

Significance: Dec 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50, Appendix B, Criterion XVI, "Corrective Action." Failure to Take Corrective Actions for a Condition Adverse to Quality

A finding of very low safety significance was identified by the inspectors for a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to take actions for a condition adverse to quality. Specifically, in September 2003 a condition report was written to address the susceptibility of fouling of a small mesh strainer installed in a fire protection line which provided emergency cooling to the turbine driven auxiliary feedwater pumps and turbine bearing coolers. The condition report also identified that procedure guidance did not exist for operators to utilize an existing flush valve on the strainer if the strainer became clogged during use. The inspectors identified that in August 2004, the condition report was closed with no actions taken to address this condition adverse to quality. At the end of the inspection, the licensee took corrective actions to ensure that as a minimum, the appropriate procedural guidance existed if the strainer became clogged during use.

The inspectors also concluded the primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to take any corrective actions to correct this condition adverse to quality.

This finding was more than minor because if left uncorrected the finding could become a more significant safety concern. In addition, the finding affected the mitigating systems cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. In accordance with the Significance Determination Process, this finding was determined to be a Non-Cited Violation of very low safety significance because it was not a design or qualification deficiency that was confirmed to result

in a loss of function per Generic Letter 91-18.

Inspection Report# : [2004012\(pdf\)](#)

Significance: SL-IV Dec 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a Safety Evaluation as Required by 10 CFR 50.59, "Changes, Tests and Experiments"

The inspectors identified a Severity Level IV Non-Cited Violation of 10 CFR 50.59(d)(1) for the licensee's failure to perform a safety evaluation for changes made to the Final Safety Analysis Report. Specifically, the licensee 'screened out' a change to the Final Safety Analysis Report which modified operator response times for the Steam Generator Tube Rupture Chapter 14 Accident Analysis contained in the Final Safety Analysis Report. Specifically, a time requirement for equalizing primary and secondary pressure was removed from the Final Safety Analysis Report. In addition, the licensee changed the time in which isolation of the affected Steam Generator could be achieved from 10 minutes to 30 minutes. At the end of the inspection period the licensee initiated a corrective action to perform a safety evaluation in accordance with 10 CFR 50.59 for this Final Safety Analysis Report change.

Because the Significance Determination Process is not designed to assess the significance of violations that potentially impact or impede the regulatory process, this issue was dispositioned using the traditional enforcement process in accordance with Section IV of the NRC Enforcement Policy. However, the results of the violation were assessed using the Significance Determination Process.

This finding was determined to be more than minor because the inspectors could not reasonably determine that the change would not ultimately require NRC approval. The inspectors determined that even though the change was not adequately evaluated in accordance with 10 CFR 50.59, this violation was of very low safety significance because the design basis safety-related functions of mitigating systems to respond to this initiating event scenario were not adversely affected. The inspectors evaluated the results of the finding using the Significance Determination Process for the mitigating systems cornerstone. The inspectors determined that the results of the finding were of very low safety significance because the finding was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18. Therefore, the results of the violation were determined to be of very low safety significance and the violation was classified as a Severity Level IV Non-Cited Violation.

Inspection Report# : [2004012\(pdf\)](#)

G

Significance: Dec 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50, Appendix B, Criterion XI, "Test Control." Failure to Have Adequate Test Procedures for the Testing of Safety-Related Switches

A Green finding associated with a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," was identified by the inspectors for the failure to establish and perform testing required to demonstrate that components will perform satisfactorily in service with written test procedures which incorporate applicable requirements and acceptance limits. The licensee performed post-maintenance testing of a component cooling water pump control switch, a safety-related component, without the use of a written test procedure which incorporated the applicable requirements and acceptance limits for testing to demonstrate the component would perform satisfactorily in service. The licensee's extent of condition identified the potential for at least 11 additional activities for which safety-related components did not have the appropriate test procedures established. At the end of the inspection period, the licensee developed actions to correct the identified deficiencies and to ensure licensee personnel were aware of the requirements to use procedures for the testing of safety-related components.

This issue was more than minor because if left uncorrected the finding could become a more significant safety concern. In addition, the finding affected the mitigating systems cornerstone attribute of procedure quality, specifically maintenance and testing (pre-event) procedures, and the cornerstone objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. In accordance with the Significance Determination Process, this finding was determined to be a Non-Cited Violation of very low safety significance because the finding was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18.

Inspection Report# : [2004012\(pdf\)](#)

G

Significance: Nov 19, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Ensure That a Safe Shutdown Procedure Directed Alignment of Instrumentation to a Direct Current Bus with a Battery Charger

A finding of very low safety significance was identified by the inspectors for failure to align safe shutdown instrumentation to an electrical bus with a battery charger in procedure AOP-10A, "Safe Shutdown - Local Control." Specifically, the procedure aligned Units 1 and 2 safe shutdown instrumentation to a 125Vdc bus that did not have a battery charger available to support the selected instrumentation.

This issue was more than minor because it affected the procedure quality attribute of the Reactor Safety Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. Specifically, the safe shutdown instrumentation associated with this bus, without a battery charger, could potentially become inoperable as the voltage of the battery supplying the bus decreased. Operators could select another bus with a safe shutdown inverter, however, the procedure did not direct this action. To

correct this procedural error, the licensee issued Temporary Change Notice 2004-0762. This issue was entered into the licensee's corrective action program as CAP059262 and CE014635. The issue was of very low safety significance because it did not represent an actual loss of a safety function. The issue was a Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instruction, Procedures, and Drawings," for failure to provide a procedure of a type appropriate to the circumstances.

Inspection Report# : [2004010\(pdf\)](#)

Significance:  Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Vendor Breaker Testing Requirements Not Incorporated in Procedure

The inspectors identified a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," because the licensee did not evaluate a Technical Bulletin issued by Westinghouse in March 2004 regarding safety-related breakers and incorporate the testing instructions specified in the Bulletin into the applicable station procedures.

The finding was greater than minor because it was associated with the procedure quality attribute of the Reactor Safety Mitigating Systems cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low significance as it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program. As part of corrective actions, the licensee evaluated the Technical Bulletin and incorporated the testing instructions into applicable station procedures.

Inspection Report# : [2004008\(pdf\)](#)

Significance:  Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective Actions for a Part 21 Notification on Diesel Governors Were Not Timely

The inspectors identified a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," because the licensee failed to promptly evaluate and resolve a 10 CFR Part 21 issue from 2001 involving the governors on all four emergency diesel generators (EDGs). The Part 21 issue pertained to the service life of electrolytic capacitors in the governor control system of all four safety-related EDGs. The capacitors in the four EDGs were beyond the service life specified by the vendor in the Part 21 and, in three of four EDGs, the capacitors were beyond the industry's slightly longer replacement interval.

The finding is greater than minor because it was associated with the equipment performance attribute of the Reactor Safety Mitigating Systems cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems (the EDGs) that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance because it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program and evaluated a recent industry study that indicated a slightly greater service life of the capacitors. In addition, the licensee has made plans to replace the capacitors on an accelerated schedule.

Inspection Report# : [2004008\(pdf\)](#)

Significance:  Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement a Molded-Case Circuit Breaker Test Program

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," because the licensee failed to implement a program to assure that the installed molded-case circuit breakers (MCCBs) will perform satisfactorily in service.

The finding was greater than minor because it was associated with the Reactor Safety Mitigating Systems cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the availability, reliability, capability of systems that responds to initiating events to prevent undesirable consequences (i.e., core damage). Molded-case circuit breakers provide for breaker coordination, over-current protection, fire prevention, and multiple other safety-related functions. The finding is of very low safety significance because it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program. As part of its corrective actions, the licensee planned to institute an exercising and testing program for safety-related MCCBs.

Inspection Report# : [2004008\(pdf\)](#)

Significance:  Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Untimely Identification of Overfilled Safety Injection Accumulator

A finding of very low safety significance was identified by the inspectors for a violation of 10 CFR Part 50, Appendix B, Criterion XVI,

"Corrective Action." The licensee had indications in mid-February 2004 that the water level in a Unit 2 safety injection accumulator was high offscale, a significant condition adverse to quality, but the indications were not verified until about 1½ months later. In addition, the licensee did not evaluate why the issue took 1½ months to resolve.

The finding is greater than minor because it was associated with the human performance attribute of the Reactor Safety Mitigating Systems cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems (the safety injection system) that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance because it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. As corrective action, the licensee implemented a procedure to ensure that decision-making for future significant equipment problems was conducted in a systematic, well-thought out manner.

Inspection Report# : [2004008\(pdf\)](#)

Significance:  Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Vendor Torque Values Not Listed in Procedure

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," having very low safety significance. Specifically, the licensee failed to incorporate the vendor's torque requirements for breaker arc chute fasteners into station procedures.

The finding is greater than minor because it was associated with the procedure quality attribute of the Reactor Safety Mitigating System cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance because it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program and revised the procedure to include the vendor's torque requirements.

Inspection Report# : [2004008\(pdf\)](#)

Significance:  Jul 16, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Test Service Water Headers

The inspectors identified a Non-Cited Violation of 10 CFR 50.55a(g)(4) and 10 CFR 50.55a(g)(5)(iv) associated with failure to perform testing of the buried service water header piping in accordance with the American Society of Mechanical Engineers Code Section XI requirements. The licensee's corrective actions included verifying that quarterly system flow tests provided basis for service water header operability.

This finding was more than minor because it affected the Mitigating Systems Cornerstone objective of equipment reliability and if left uncorrected, could have allowed undetected through-wall flaws to develop in the header piping. These flaws could then continue to grow in size until leakage from the buried headers degraded system operation or if sufficient general corrosion occurs, a gross rupture or collapse of the piping sections could occur. The finding is of very low safety significance and screened as Green using the Significance Determination Process Phase 1 screening worksheet.

Inspection Report# : [2004004\(pdf\)](#)

Significance:  Jul 16, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Correctly Translate Condensate Storage Tank Temperature Limits into Procedures and Instructions

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," in that the design bases for the maximum Condensate Storage Tank (CST) temperature was not correctly translated into procedures and instructions. Specifically, the Main Steam Line Break (MSLB) Containment Integrity Analysis assumed a maximum value of 100 degrees Fahrenheit for the temperature of the water in the CST, while operations procedures allowed a maximum of 120 degrees Fahrenheit for the CST temperature. This finding applies to both units. The licensee's corrective actions included procedural changes to reflect the correct temperature limit.

This finding was more than minor because an evaluation was required to ensure that accident analysis requirements were met, since the CST was heated up to greater than the maximum analysis value of 100 degrees Fahrenheit during unit startup/shutdown operations with the CST aligned to the operating unit. The finding is of very low safety significance and screened as Green using the Significance Determination Process Phase 1 screening worksheet.

Inspection Report# : [2004004\(pdf\)](#)

Significance:  Jul 16, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Periodically Verify Position of Valves in the Service Water (SW) System

The inspectors identified a Non-Cited Violation of Technical Specification Surveillance Requirements SR 3.7.8.1 and SR 3.6.3.2 associated with the periodic verification of the position of valves and flanges in the SW system flow paths servicing safety related equipment and in lines associated with containment isolation. Specifically, the licensee did not verify that approximately 100 valves in the SW system flow path servicing safety related equipment that were not locked, sealed, or otherwise secured in position, were in the correct position every 31 days while the Units were in Mode 1, 2, 3, or 4. In addition, the licensee did not verify that 12 containment isolation manual valves were closed and two pipe fittings associated with containment isolation were in place every 31 days while the Units were in Mode 1, 2, 3, or 4. This finding applies to both units. The licensee's corrective actions included locking the appropriate valves and procedural changes.

This finding was more than minor because it was, for the most part, associated with the Mitigating Systems attribute of Configuration Control, which affected the Mitigating Systems Cornerstone objective of ensuring the availability and reliability of the SW system to respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance and screened as Green using the Significance Determination Process Phase 1 screening worksheet.

Inspection Report# : [2004004\(pdf\)](#)

G

Significance: Jul 16, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Translate Original Design Requirements for the 480-Volt Alternating Current (Vac) System

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to adequately translate original design requirements for the 480 Vac system into specifications during procurement of new and replacement equipment. The original specifications for equipment such as motors and cables identified the intended service as suitable for a 480 Vac ungrounded system. Specifications for replacement motors did not specify the intended service as an ungrounded system. The licensee's corrective actions included a verification that the identified equipment that did not specify use in a 480 Vac ungrounded system could withstand the overvoltage conditions that can occur on ungrounded systems.

This finding was more than minor because it involved the design control attribute of the Mitigating Systems cornerstone and affected the objective of ensuring the capability of the safety related 480 Vac system in response to initiating events to prevent undesirable consequences. Specifically, the failure to specify the correct service conditions may have resulted in motors being supplied without the enhanced insulation systems required to withstand the overvoltage conditions that can occur on ungrounded systems when a single line to ground occurs. The finding is of very low safety significance and screened as Green using the Significance Determination Process Phase 1 screening worksheet.

Inspection Report# : [2004004\(pdf\)](#)

R

Significance: Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

Apparent violation of 10 CFR Part 50, Appendix B, Criterion III, for the failure to establish the appropriate design control measures for the installation of orifices to the AFW recirculation lines

An apparent violation was identified, in part, through a self-revealing event when decreased auxiliary feedwater pump recirculation flow was noted during post-maintenance testing. Subsequent licensee and NRC review of the event determined that the licensee had installed incorrectly designed orifices in each of the pump recirculation lines. The orifices, due to small clearances, were susceptible to plugging. The primary causes of this finding were inadequacies in the licensee's design process and the licensee's implementation of the process, including the identification of system design requirements and the development of supporting safety evaluations.

The issue has been preliminarily determined to have high safety significance (Red). Following installation of the inadequately designed orifices, the entire auxiliary feedwater system was susceptible to a common mode failure during operations using service water. Failure of auxiliary feedwater during several initiating events could lead to core damage. The installation of the incorrectly designed orifices in the recirculation lines is an apparent violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

On December 11, 2003, the final significance determination letter was issued for this finding. It was determined that this is a RED finding for Unit 2 and a YELLOW finding for Unit 1. For tracking purposes, identical findings were opened for Unit 1 (designated as YELLOW) and Unit 2 (designated as RED).

Inspection Report# : [2002015\(pdf\)](#)

Significance: N/A Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

The failure to identify the root cause and implement corrective actions for the AFW/IA issue, a significant condition adverse to quality, so as to prevent recurrence.

A violation was identified for the licensee's failure to implement adequate corrective actions to effectively address a previous Red finding and preclude recurrence (Inspection Report 50-266/01-17; 50-301/01-17). Specifically, the licensee failed to identify potential common mode failures that existed involving power supplies to the recirculation line air-operated valve and other system components. In addition, the licensee's corrective actions for the potential common mode failure associated with a loss of instrument air did not preclude repetition. Specifically, the licensee's corrective actions, to upgrade the safety function of the air-operated recirculation valve, failed to ensure that

successful operation of the recirculation line air-operated valve was dependent only on safety-related support systems. Following the corrective actions, successful operation of the valve was still dependent upon nonsafety-related power to an interposing relay. Additionally, the corrective actions failed to discover a single failure mechanism involving a system orifice modification.

The issue was more than minor because the failure to implement appropriate corrective actions resulted in the auxiliary feedwater system continuing to rely on nonsafety-related support systems and to be susceptible to a single event causing a total system failure. The failure of nonsafety-related support systems and single event failures are an expected condition during several design basis accidents and should not cause a safety system to fail. The failure of the licensee to implement adequate corrective actions is a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action."

This violation is associated with a previously identified RED finding (IR 50-266;50-30/01-17).
Inspection Report# : [2002015\(pdf\)](#)



Significance: Feb 28, 2002

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002.

Inspection Report 50-266/02-15; 50-301/02-15, issued April 2, 2003, documented the NRC decision that this finding is not an Old Design Issue.

Inspection Report# : [2001017\(pdf\)](#)

Inspection Report# : [2003003\(pdf\)](#)

Barrier Integrity



Significance: Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement Adequate Corrective Actions to Preclude Repetition of a Significant Condition Adverse to Quality

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to take adequate corrective action to preclude repetition of a significant condition adverse to quality was identified by the inspectors. Specifically, the licensee identified that the root cause of an April 9, 2004, potential loss of a hot leg vent path during nozzle dam installation, a failure to adequately identify, track and maintain licensee commitments to Generic Letter 88-17 in plant procedures, a significant condition adverse to quality. Prior to the start of the Unit 2 Refueling Outage, the inspectors identified that the approved outage shutdown safety analysis contained an orange risk path, during which the licensee would have been unable to close the containment equipment hatch within the time to boil the water around the fuel. The licensee's root cause evaluation for this issue identified the root cause was the same as the April 2004 event; therefore, the licensee's corrective actions from the April 2004 event failed to preclude repetition of the identified cause. The licensee took prompt corrective action to remove these planned activities from the outage schedule to ensure the equipment hatch was closed when the RCS was breached; however, the licensee also identified in the root cause evaluation that this configuration actually occurred in the 1999 Unit 1 Refueling Outage.

The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution, because the licensee failed to take adequate corrective actions to preclude repetition of a significant condition adverse to quality.

The issue was more than minor because the finding was associated with preserving the containment boundary attribute of the Barrier Integrity cornerstone and affected the cornerstone objective of providing reasonable assurance that the physical design barriers (Containment) protect the public from radionuclide releases cause by accidents or events. The inspectors evaluated the finding using IMC 0609, Appendix G, Phase 1 Screening, Checklist 3, "PWR Cold Shutdown and Refueling Operation RCS Open and Refueling Cavity Level <23'," specifically Section IV, "Containment Control Guidelines." The finding dealt with the procedures and training to close containment prior to core boiling when the RCS

was open. The finding did not meet any of the criteria requiring a Phase 2 or 3 Analysis per Appendix G, Checklist 3, specifically findings that degrade the ability of containment to remain intact following a severe accident. This was in part due to the type of RCS system breach which was scheduled. Therefore, the finding was determined to be of very low significance. The licensee took prompt action to enter the item into the corrective action process, evaluate the issues and develop corrective actions to address the causes of this finding to preclude repetition. Inspection Report# : [2005004\(pdf\)](#)

Emergency Preparedness

Significance: SL-III Dec 16, 2003

Identified By: NRC

Item Type: VIO Violation

10 CFR 50.54, 10 CFR 50.47 apparent violation for failure to maintain a standard scheme of emergency action levels

The inspectors identified an apparent violation of 10 CFR 50.54(q), associated with emergency planning standard 10 CFR 50.47(b)(4), which will be subject to the NRC traditional enforcement process not the revised Reactor Oversight Process. Specifically, the licensee failed to maintain a standard scheme of emergency action levels (EALs). Eight EALs were changed in 1998 and 1999. The changes decreased the effectiveness of the Emergency Plan in that emergency conditions that would have resulted in classifications at the General Emergency (GE), Alert, and Notification of Unusual Event (NOUE) levels would result in a lesser classification under the current EAL scheme. Approval of the NRC was not obtained prior to the changes being made. Since the identification of the issue by the inspectors, the licensee has revised the eight EALs to be equivalent with those approved by the NRC in 1984.

In a letter dated March 17, 2004, a Notice of Violation and Proposed Imposition of Civil Penalty - \$60,000, was issued.

Inspection Report# : [2003007\(pdf\)](#)

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

Last modified : August 24, 2005

Point Beach 2

3Q/2005 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Sep 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective Action Violation for Untimely Repair of Emergency Diesel Generator Cooling System Endbells With Microbiologically-Induced Corrosion

The inspectors identified a Green finding with an associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to take adequate corrective action for microbiologically-induced corrosion (MIC) of the endbells of the service water cooling system of the G-01 emergency diesel generator (EDG). Specifically, significant wastage caused by MIC, on the EDG endbells was identified in 2001 and work orders were written to replace the endbells. However, as of March 20, 2005, the endbells were not replaced which resulted in a self-revealed through-wall leak from MIC on an endbell, requiring the diesel to be removed from service to effect repairs. The licensee took immediate corrective actions to replace the endbell, followed by replacement of other susceptible EDG endbells. In addition, the licensee proposed changes to the predictive maintenance program to better identify potential sources of MIC corrosion in service water system components.

The issue was more than minor because the finding was associated with the equipment performance attribute of the Mitigating System cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. In addition, if left uncorrected, the finding could have become a more significant safety concern. The finding was determined to be of very low safety significance because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the Technical Specification allowed outage time, and no risk due to external events. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to take adequate corrective actions.

Inspection Report# : [2005010\(pdf\)](#)

Significance:  Sep 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Technical Specification Violation for Inoperable Emergency Diesel Generator Because of Mis-Positioned Room Exhaust Fan Breaker

The inspectors identified a Green finding with an associated Non-Cited Violation of Technical Specification 3.8.1.E for the self-revealed problem on August 7, 2005, when one of the required room exhaust fans for the G-01 EDG failed to start due to a mispositioned breaker. The licensee returned the breaker to the proper position and investigated the cause of the mispositioning. The licensee planned and had taken additional corrective actions to provide clarification for aborting a procedure or scheduled activity and for ensuring equipment was appropriately returned to service.

The finding was more than minor, in that, it was associated with the configuration control attribute of the Mitigating System cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low safety significance because it did not involve a design deficiency, there was no actual loss of safety function, no single train loss of safety function for greater than the Technical Specification (TS)-allowed outage time, and no risk due to external events. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of human performance, because the licensee failed to ensure that the appropriate conditions were established after completion and cancellation of maintenance activities and before re-aligning G-01 to the safeguards bus.

Inspection Report# : [2005010\(pdf\)](#)

Significance:  Sep 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Technical Specification Violation for Lack of a Procedure for Tripping Failed Loss-of-Voltage Relays

The inspectors identified a Green finding with an associated Non-Cited Violation of Technical Specification 5.4.1 for the failure to have a procedure to trip a loss-of-voltage time delay relay, a specific and foreseen potential malfunction, after the time delay function of the channel

had failed. Specifically, on August 17, 2005, relay 1-62-3/A-06, associated with one channel of the 4160-Volt loss-of-voltage time delay function of the loss of offsite power EDG start and load sequence instrumentation, failed during calibration and testing. The licensee was not able to place the channel in trip in one hour (as required by TSs) due to not having an established procedure for performing this activity. The licensee took immediate corrective actions to correct the condition by replacing the time delay relay. In addition, at the end of the inspection period, the licensee planned additional evaluations and corrective actions to ensure the capability of performing the Technical Specification Action Condition within the required time frame.

The finding was more than minor, in that, it was associated with the procedure quality attribute of the Mitigating System cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low risk significance because it did not involve a design deficiency, there was no actual loss of safety function, no single train loss of safety function for greater than the TS-allowed outage time, and no risk due to external events.

Inspection Report# : [2005010\(pdf\)](#)

G

Significance: Aug 19, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedure for Starting Motor-Driven AFW Pumps for Certain Control Room Evacuations

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed on July 19, 2005, for the failure to have an appropriate procedure to assure proper operation of the motor-driven auxiliary feedwater (AFW) minimum recirculation valves when operating the AFW system from outside the control room using local panels N-01 and N-02. As a result, if operators had performed AOP-10, "Control Room Inaccessibility," Revision 3, during an event, minimum recirculation valves AF-4007 and AF-4014 would not have opened when the AFW pumps were locally started with the discharge valves closed. This could have caused pump damage within one to two minutes.

The issue was more than minor because the finding was associated with the configuration control attribute of the Mitigating Systems cornerstone and adversely impacted the cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix A, which indicated that a Phase 2 evaluation was necessary. However, because procedure AOP-10 was used when the control room was evacuated with no Appendix R fire and no other accident conditions, a Phase 3 evaluation was performed. The issue was characterized as Green based on the low initiating event frequency (evacuation of the control room for reasons other than an Appendix R fire) coupled with the accident mitigation available from the turbine-driven AFW pumps and feed and bleed capability. The licensee took prompt corrective action to revise procedure AOP-10.

Inspection Report# : [2005011\(pdf\)](#)

Significance: SL-IV Aug 19, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

No. 50.59 Safety Evaluation for a 2002 Modification to AFW

The inspectors identified a Severity Level IV, Non-Cited Violation of 10 CFR 50.59(d)(1) for the licensee's failure in September 2002 to perform a safety evaluation of the removal of the internals of the auxiliary feedwater (AFW) common recirculation line check valve, AF-117. Specifically, the licensee 'screened out' adverse changes made concerning the function and operation of all four AFW pumps. In this case, an automatic passive design feature of the AFW recirculation line piping was being made unavailable and the function was being changed to operation of an untested, nonsafety-related, active component--the AFW common recirculation line relief valve AF-4035--and it was being supplemented through the use of manual operator actions. This change warranted a 10 CFR 50.59 safety evaluation to determine if the changes met the criteria requiring a licensee amendment.

Because the issue potentially affected the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. This finding was determined to be more than minor because the inspectors could not reasonably determine that the original change would have ultimately required NRC approval. The inspectors completed a Significance Determination Review using IMC 0609, Appendix A "Significance Determination of Reactor Inspection Findings for At Power Situations." Using the Phase 1 Screening worksheet the finding was determined to be of very low safety significance (Green) since the finding did not represent an actual loss of safety function for greater than the Technical Specification allowed outage time. Comparing this item to the examples in NUREG 1600, Supplement I, this finding is similar to Item D.5, "Violations of 10 CFR 50.59 that do not involve circumstances in which a change that required prior Commission approval would not be found acceptable had the approval been sought." As a result, the issue was considered to be of very low safety significance and was dispositioned as a Severity Level IV, Non-Cited Violation (NCV).

Inspection Report# : [2005011\(pdf\)](#)

G

Significance: Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadvertent Loss of Decay Heat Removal Capability

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the failure to verify the appropriate residual heat removal (RHR) system lineup prior to the issuance of a tagging order. As a result, upon implementation of the tagging order, the licensee also failed to maintain cooling for the Unit 2 reactor coolant

system (RCS) in accordance with licensee procedures. Specifically, on April 19, 2005, the licensee performed a tagout on the 'B' train of safety injection while the 'B' RHR heat exchanger was in service and inadvertently isolated flow through the 'B' RHR heat exchanger, causing a loss of RHR for approximately 40 minutes.

The inspectors determined that a primary cause of this finding was related to the cross-cutting area of Human Performance, because the licensee failed to verify the appropriate conditions were established for implementation of the tagout.

The issue was more than minor because the finding was associated with the configuration control attribute of the Mitigating Systems cornerstone and adversely impacted the cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix G, Phase 1 Screening, Checklist 4, "Pressurized Water Reactor (PWR) Refueling Operations: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," specifically, Section I.C, "Core Heat Removal Guidelines - Equipment," was applicable to this finding. The finding affected the RHR loop which was operable and in operation; however, the finding did not meet the requirements for a Phase 2 or Phase 3 analysis per Appendix G. Therefore the finding was determined to be of very low significance. The licensee took prompt action to enter the item into the corrective action process, develop and implement interim corrective actions and evaluate the issues to develop additional corrective actions.

Inspection Report# : [2005004\(pdf\)](#)

G

Significance: Jun 30, 2005

Identified By: NRC

Item Type: FIN Finding

Adverse Trend of Failure to Ensure Causal Evaluations for Conditions Adverse to Quality for which Operability Recommendations were Performed

The inspectors identified a finding of very low significance (Green) for an adverse trend of failures to perform causal evaluations for conditions adverse to quality which only received operability recommendations, to ensure the cause of the conditions were identified and corrected. The licensee further evaluated the issue and corroborated the adverse trend, and in addition identified the issue potentially extended to condition reports documenting conditions adverse to quality with only maintenance rule evaluations performed. No violation of NRC requirements occurred.

The inspectors also determined that the primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution, because the licensee failed to perform causal evaluations commensurate with the significance of the condition reports to ensure the conditions adverse to quality were identified and corrected.

The issue was more than minor because the underlying issues associated with the finding were associated with the equipment performance and design control attributes of the Mitigating Systems cornerstone and adversely impacted the cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix A, Phase 1 screening for the Mitigating Systems cornerstone and determined the finding was of very low significance. The licensee took action to enter the item into the corrective action process and develop interim corrective actions. At the end of the inspection period, the licensee had not completed the evaluation of the finding.

Inspection Report# : [2005004\(pdf\)](#)

G

Significance: Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadvertent Refueling Water Storage Tank Inventory Loss

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed when an inadvertent inventory loss from the Unit 2 refueling water storage tank occurred. The inventory loss occurred when licensee personnel performed two procedures concurrently, which was not appropriate to the circumstances due to the equipment configuration conflicts created by performing the test procedures in this manner.

The inspectors determined that the primary cause of this finding was related to the cross-cutting area of Human Performance, because the licensee failed to appropriately validate and verify the procedures could be performed concurrently.

The issue was more than minor because the finding was associated with the configuration control and procedure quality attributes of the Mitigating Systems cornerstone and adversely impacted the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent core damage. The inspectors evaluated the finding using IMC 0609, Appendix G, Phase 1 Screening, Checklist 4, "PWR Refueling Operations: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," specifically Section II.C, "Inventory Control Guidelines-Equipment," was applicable to this finding. The inspectors determined the finding affected equipment necessary for makeup to the refueling cavity; however, the finding did not meet the requirements for a Phase 2 or Phase 3 analysis per Appendix G. Therefore the finding was determined to be of very low significance. The licensee took prompt action to enter the item into the corrective action process, evaluate the issues and develop corrective actions to address the causes of this finding.

Inspection Report# : [2005004\(pdf\)](#)

G**Significance:** Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Multiple Design Calculation Errors of very Low Safety Significance

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors. Specifically, the licensee failed to apply design control measures to verify the adequacy of the design for the head assembly upgrade package (HAUP) associated with the replacement reactor vessel closure head. Specifically, design calculations that support the HAUP design basis contained errors, including the failure to specify the American Institute of Steel Construction (AISC) or American Society of Mechanical Engineers Boiler and Pressure Vessel Code minimum fillet weld size requirements, the failure to transform bolt design loads into the analysis bolt pattern coordinate system, and the failure to evaluate the control rod drive mechanism cooling duct as a slender component in accordance with Appendix B5 of the AISC design code.

The finding was more than minor because if left uncorrected the finding could become a more significant safety concern. Specifically, failure to specify the AISC or American Society of Mechanical Engineers Code required minimum fillet weld size, or failure to transform bolt design loads into the analysis bolt pattern coordinate system, or failure to evaluate slender section components in accordance with AISC Appendix B5 in similar design calculations could result in modifications that exceed licensing basis design acceptance limits. The finding was of very low safety significance because the calculation errors in these instances did not result in an HAUP structure or component to exceed its design basis acceptance limit. The licensee took prompt action to enter the item into the corrective action process, evaluate the issues and develop corrective actions to address the causes of this finding.

Inspection Report# : [2005004\(pdf\)](#)G**Significance:** Mar 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Emergency Diesel Generator Fuel Oil Filters in Duplex

A Green finding associated with a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified by the inspectors for the failure to take corrective actions for a condition adverse to quality. The inspectors noted that in March 2003, corrective action program document CAP031641 was written to assess the licensee's operational practice of having the two fuel oil duplex strainers on each of the four emergency diesel generators set to dual filter mode instead of single mode. The assessment concluded that the optimal position was single mode because it allowed changing the filter elements with the emergency diesel generator running. The dual filter mode required the emergency diesel generator to be stopped to change the filters. In January 2004, CAP031641 was closed with no actions taken to address this condition adverse to quality.

The inspectors also determined that the primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to take any corrective actions to correct this condition adverse to quality.

This issue was more than minor because if left uncorrected the finding could become a more significant safety concern. In addition, the finding affected the Mitigating Systems cornerstone attributes of configuration control and equipment performance. The inspectors evaluated the finding using NRC Inspection Manual Chapter IMC 0609, Appendix A, Phase 1 screening for the Mitigating Systems cornerstone and determined that the finding was of very low safety significance because it was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18.

Inspection Report# : [2005003\(pdf\)](#)G**Significance:** Feb 27, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedure Delays Return of Battery Charger

A finding of very low safety significance was self-revealed for a violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an Abnormal Operating Procedure (AOP) that was not adequate for returning safety-related battery chargers to an operable status. Specifically, on February 27, 2005, an offsite line experienced a fault and became disconnected, causing a momentary phase-to-phase short and then a continuous open circuit. The transient caused a loss of power to all in-service safety-related battery chargers. Three of the four chargers were restored using the AOP, but one battery charger could not be promptly restored to service because the AOP was inadequate. The licensee took prompt action to enter the item into the corrective action process and change the procedure.

The inspectors concluded that the finding was more than minor because if left uncorrected the item could become a more significant safety concern, and it was associated with the procedure quality attribute of the Mitigating Systems cornerstone. The finding was considered to be of very low safety significance since the finding did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event.

Inspection Report# : [2005003\(pdf\)](#)G**Significance:** Feb 16, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Air Leak On AFW Recirculation Flow Control Valve

A finding of very low safety significance associated with a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings" was identified by the inspectors. The finding was associated with an air leak that inspectors found on an air supply fitting to the minimum flow recirculation control valve for the Unit 2 turbine-driven auxiliary feedwater (TDAFW) pump. The licensee determined that the leak most likely resulted when a fitting was inadvertently loosened during maintenance. Post-maintenance testing did not detect the loose fitting. Following discovery of the leak by the inspectors 6 days after the maintenance, the licensee entered the issue into its corrective action program, declared the TDAFW pump for Unit 2 inoperable, and repaired the leak.

The inspectors determined that the primary cause of this finding was related to the cross-cutting area of human performance, because the licensee failed to ensure that post-maintenance testing was adequately conducted for the component.

This issue is more than minor because it impacted the operability of a component in the Mitigating Systems cornerstone and affected the objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was screened through the Phase II screening in the Significance Determination Process (SDP) of Inspection Manual Chapter (IMC) 0609, Appendix A, "Determining the Significance of Reactor Inspection Findings for At Power Situations," since the component was impacted for greater than the Limiting Condition for Operation. The findings was determine to be of very low safety significance based on the review. This finding was a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings."

Inspection Report# : [2005003\(pdf\)](#)



Significance: G Dec 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50, Appendix B, Criterion XVI, "Corrective Action." Failure to Take Corrective Actions for a Condition Adverse to Quality

A finding of very low safety significance was identified by the inspectors for a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to take actions for a condition adverse to quality. Specifically, in September 2003 a condition report was written to address the susceptibility of fouling of a small mesh strainer installed in a fire protection line which provided emergency cooling to the turbine driven auxiliary feedwater pumps and turbine bearing coolers. The condition report also identified that procedure guidance did not exist for operators to utilize an existing flush valve on the strainer if the strainer became clogged during use. The inspectors identified that in August 2004, the condition report was closed with no actions taken to address this condition adverse to quality. At the end of the inspection, the licensee took corrective actions to ensure that as a minimum, the appropriate procedural guidance existed if the strainer became clogged during use.

The inspectors also concluded the primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to take any corrective actions to correct this condition adverse to quality.

This finding was more than minor because if left uncorrected the finding could become a more significant safety concern. In addition, the finding affected the mitigating systems cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. In accordance with the Significance Determination Process, this finding was determined to be a Non-Cited Violation of very low safety significance because it was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18.

Inspection Report# : [2004012\(pdf\)](#)

Significance: SL-IV Dec 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a Safety Evaluation as Required by 10 CFR 50.59, "Changes, Tests and Experiments"

The inspectors identified a Severity Level IV Non-Cited Violation of 10 CFR 50.59(d)(1) for the licensee's failure to perform a safety evaluation for changes made to the Final Safety Analysis Report. Specifically, the licensee 'screened out' a change to the Final Safety Analysis Report which modified operator response times for the Steam Generator Tube Rupture Chapter 14 Accident Analysis contained in the Final Safety Analysis Report. Specifically, a time requirement for equalizing primary and secondary pressure was removed from the Final Safety Analysis Report. In addition, the licensee changed the time in which isolation of the affected Steam Generator could be achieved from 10 minutes to 30 minutes. At the end of the inspection period the licensee initiated a corrective action to perform a safety evaluation in accordance with 10 CFR 50.59 for this Final Safety Analysis Report change.

Because the Significance Determination Process is not designed to assess the significance of violations that potentially impact or impede the regulatory process, this issue was dispositioned using the traditional enforcement process in accordance with Section IV of the NRC Enforcement Policy. However, the results of the violation were assessed using the Significance Determination Process.

This finding was determined to be more than minor because the inspectors could not reasonably determine that the change would not ultimately require NRC approval. The inspectors determined that even though the change was not adequately evaluated in accordance with 10 CFR 50.59, this violation was of very low safety significance because the design basis safety-related functions of mitigating systems to respond to this initiating event scenario were not adversely affected. The inspectors evaluated the results of the finding using the Significance Determination Process for the mitigating systems cornerstone. The inspectors determined that the results of the finding were of very low safety significance

because the finding was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18. Therefore, the results of the violation were determined to be of very low safety significance and the violation was classified as a Severity Level IV Non-Cited Violation.

Inspection Report# : [2004012\(pdf\)](#)

Significance:  Dec 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50, Appendix B, Criterion XI, "Test Control." Failure to Have Adequate Test Procedures for the Testing of Safety-Related Switches

A Green finding associated with a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," was identified by the inspectors for the failure to establish and perform testing required to demonstrate that components will perform satisfactorily in service with written test procedures which incorporate applicable requirements and acceptance limits. The licensee performed post-maintenance testing of a component cooling water pump control switch, a safety-related component, without the use of a written test procedure which incorporated the applicable requirements and acceptance limits for testing to demonstrate the component would perform satisfactorily in service. The licensee's extent of condition identified the potential for at least 11 additional activities for which safety-related components did not have the appropriate test procedures established. At the end of the inspection period, the licensee developed actions to correct the identified deficiencies and to ensure licensee personnel were aware of the requirements to use procedures for the testing of safety-related components.

This issue was more than minor because if left uncorrected the finding could become a more significant safety concern. In addition, the finding affected the mitigating systems cornerstone attribute of procedure quality, specifically maintenance and testing (pre-event) procedures, and the cornerstone objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. In accordance with the Significance Determination Process, this finding was determined to be a Non-Cited Violation of very low safety significance because the finding was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18.

Inspection Report# : [2004012\(pdf\)](#)

Significance:  Nov 19, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Ensure That a Safe Shutdown Procedure Directed Alignment of Instrumentation to a Direct Current Bus with a Battery Charger

A finding of very low safety significance was identified by the inspectors for failure to align safe shutdown instrumentation to an electrical bus with a battery charger in procedure AOP-10A, "Safe Shutdown - Local Control." Specifically, the procedure aligned Units 1 and 2 safe shutdown instrumentation to a 125Vdc bus that did not have a battery charger available to support the selected instrumentation.

This issue was more than minor because it affected the procedure quality attribute of the Reactor Safety Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. Specifically, the safe shutdown instrumentation associated with this bus, without a battery charger, could potentially become inoperable as the voltage of the battery supplying the bus decreased. Operators could select another bus with a safe shutdown inverter, however, the procedure did not direct this action. To correct this procedural error, the licensee issued Temporary Change Notice 2004-0762. This issue was entered into the licensee's corrective action program as CAP059262 and CE014635. The issue was of very low safety significance because it did not represent an actual loss of a safety function. The issue was a Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instruction, Procedures, and Drawings," for failure to provide a procedure of a type appropriate to the circumstances.

Inspection Report# : [2004010\(pdf\)](#)

Significance:  Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Vendor Breaker Testing Requirements Not Incorporated in Procedure

The inspectors identified a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," because the licensee did not evaluate a Technical Bulletin issued by Westinghouse in March 2004 regarding safety-related breakers and incorporate the testing instructions specified in the Bulletin into the applicable station procedures.

The finding was greater than minor because it was associated with the procedure quality attribute of the Reactor Safety Mitigating Systems cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low significance as it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program. As part of corrective actions, the licensee evaluated the Technical Bulletin and incorporated the testing instructions into applicable station procedures.

Inspection Report# : [2004008\(pdf\)](#)

G**Significance:** Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective Actions for a Part 21 Notification on Diesel Governors Were Not Timely

The inspectors identified a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," because the licensee failed to promptly evaluate and resolve a 10 CFR Part 21 issue from 2001 involving the governors on all four emergency diesel generators (EDGs). The Part 21 issue pertained to the service life of electrolytic capacitors in the governor control system of all four safety-related EDGs. The capacitors in the four EDGs were beyond the service life specified by the vendor in the Part 21 and, in three of four EDGs, the capacitors were beyond the industry's slightly longer replacement interval.

The finding is greater than minor because it was associated with the equipment performance attribute of the Reactor Safety Mitigating Systems cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems (the EDGs) that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance because it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program and evaluated a recent industry study that indicated a slightly greater service life of the capacitors. In addition, the licensee has made plans to replace the capacitors on an accelerated schedule.

Inspection Report# : [2004008\(pdf\)](#)**G****Significance:** Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement a Molded-Case Circuit Breaker Test Program

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," because the licensee failed to implement a program to assure that the installed molded-case circuit breakers (MCCBs) will perform satisfactorily in service.

The finding was greater than minor because it was associated with the Reactor Safety Mitigating Systems cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the availability, reliability, capability of systems that responds to initiating events to prevent undesirable consequences (i.e., core damage). Molded-case circuit breakers provide for breaker coordination, over-current protection, fire prevention, and multiple other safety-related functions. The finding is of very low safety significance because it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program. As part of its corrective actions, the licensee planned to institute an exercising and testing program for safety-related MCCBs.

Inspection Report# : [2004008\(pdf\)](#)**G****Significance:** Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Untimely Identification of Overfilled Safety Injection Accumulator

A finding of very low safety significance was identified by the inspectors for a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action." The licensee had indications in mid-February 2004 that the water level in a Unit 2 safety injection accumulator was high offscale, a significant condition adverse to quality, but the indications were not verified until about 1½ months later. In addition, the licensee did not evaluate why the issue took 1½ months to resolve.

The finding is greater than minor because it was associated with the human performance attribute of the Reactor Safety Mitigating Systems cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems (the safety injection system) that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance because it did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. As corrective action, the licensee implemented a procedure to ensure that decision-making for future significant equipment problems was conducted in a systematic, well-thought out manner.

Inspection Report# : [2004008\(pdf\)](#)**G****Significance:** Nov 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Vendor Torque Values Not Listed in Procedure

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," having very low safety significance. Specifically, the licensee failed to incorporate the vendor's torque requirements for breaker arc chute fasteners into station procedures.

The finding is greater than minor because it was associated with the procedure quality attribute of the Reactor Safety Mitigating System cornerstone and affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance because it did not

involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event. The licensee entered the issue into its corrective action program and revised the procedure to include the vendor's torque requirements.

Inspection Report# : [2004008\(pdf\)](#)

R

Significance: Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

Apparent violation of 10 CFR Part 50, Appendix B, Criterion III, for the failure to establish the appropriate design control measures for the installation of orifices to the AFW recirculation lines

An apparent violation was identified, in part, through a self-revealing event when decreased auxiliary feedwater pump recirculation flow was noted during post-maintenance testing. Subsequent licensee and NRC review of the event determined that the licensee had installed incorrectly designed orifices in each of the pump recirculation lines. The orifices, due to small clearances, were susceptible to plugging. The primary causes of this finding were inadequacies in the licensee's design process and the licensee's implementation of the process, including the identification of system design requirements and the development of supporting safety evaluations.

The issue has been preliminarily determined to have high safety significance (Red). Following installation of the inadequately designed orifices, the entire auxiliary feedwater system was susceptible to a common mode failure during operations using service water. Failure of auxiliary feedwater during several initiating events could lead to core damage. The installation of the incorrectly designed orifices in the recirculation lines is an apparent violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

On December 11, 2003, the final significance determination letter was issued for this finding. It was determined that this is a RED finding for Unit 2 and a YELLOW finding for Unit 1. For tracking purposes, identical findings were opened for Unit 1 (designated as YELLOW) and Unit 2 (designated as RED).

Inspection Report# : [2002015\(pdf\)](#)

Significance: N/A Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

The failure to identify the root cause and implement corrective actions for the AFW/IA issue, a significant condition adverse to quality, so as to prevent recurrence.

A violation was identified for the licensee's failure to implement adequate corrective actions to effectively address a previous Red finding and preclude recurrence (Inspection Report 50-266/01-17; 50-301/01-17). Specifically, the licensee failed to identify potential common mode failures that existed involving power supplies to the recirculation line air-operated valve and other system components. In addition, the licensee's corrective actions for the potential common mode failure associated with a loss of instrument air did not preclude repetition. Specifically, the licensee's corrective actions, to upgrade the safety function of the air-operated recirculation valve, failed to ensure that successful operation of the recirculation line air-operated valve was dependent only on safety-related support systems. Following the corrective actions, successful operation of the valve was still dependent upon nonsafety-related power to an interposing relay. Additionally, the corrective actions failed to discover a single failure mechanism involving a system orifice modification.

The issue was more than minor because the failure to implement appropriate corrective actions resulted in the auxiliary feedwater system continuing to rely on nonsafety-related support systems and to be susceptible to a single event causing a total system failure. The failure of nonsafety-related support systems and single event failures are an expected condition during several design basis accidents and should not cause a safety system to fail. The failure of the licensee to implement adequate corrective actions is a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action."

This violation is associated with a previously identified RED finding (IR 50-266;50-30/01-17).

Inspection Report# : [2002015\(pdf\)](#)

R

Significance: Feb 28, 2002

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002.

Inspection Report 50-266/02-15; 50-301/02-15, issued April 2, 2003, documented the NRC decision that this finding is not an Old Design Issue.

Inspection Report# : [2001017\(pdf\)](#)

Inspection Report# : [2003003\(pdf\)](#)

Barrier Integrity

Significance:  Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement Adequate Corrective Actions to Preclude Repetition of a Significant Condition Adverse to Quality

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to take adequate corrective action to preclude repetition of a significant condition adverse to quality was identified by the inspectors. Specifically, the licensee identified that the root cause of an April 9, 2004, potential loss of a hot leg vent path during nozzle dam installation, a failure to adequately identify, track and maintain licensee commitments to Generic Letter 88-17 in plant procedures, a significant condition adverse to quality. Prior to the start of the Unit 2 Refueling Outage, the inspectors identified that the approved outage shutdown safety analysis contained an orange risk path, during which the licensee would have been unable to close the containment equipment hatch within the time to boil the water around the fuel. The licensee's root cause evaluation for this issue identified the root cause was the same as the April 2004 event; therefore, the licensee's corrective actions from the April 2004 event failed to preclude repetition of the identified cause. The licensee took prompt corrective action to remove these planned activities from the outage schedule to ensure the equipment hatch was closed when the RCS was breached; however, the licensee also identified in the root cause evaluation that this configuration actually occurred in the 1999 Unit 1 Refueling Outage.

The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution, because the licensee failed to take adequate corrective actions to preclude repetition of a significant condition adverse to quality.

The issue was more than minor because the finding was associated with preserving the containment boundary attribute of the Barrier Integrity cornerstone and affected the cornerstone objective of providing reasonable assurance that the physical design barriers (Containment) protect the public from radionuclide releases cause by accidents or events. The inspectors evaluated the finding using IMC 0609, Appendix G, Phase 1 Screening, Checklist 3, "PWR Cold Shutdown and Refueling Operation RCS Open and Refueling Cavity Level <23'," specifically Section IV, "Containment Control Guidelines." The finding dealt with the procedures and training to close containment prior to core boiling when the RCS was open. The finding did not meet any of the criteria requiring a Phase 2 or 3 Analysis per Appendix G, Checklist 3, specifically findings that degrade the ability of containment to remain intact following a severe accident. This was in part due to the type of RCS system breach which was scheduled. Therefore, the finding was determined to be of very low significance. The licensee took prompt action to enter the item into the corrective action process, evaluate the issues and develop corrective actions to address the causes of this finding to preclude repetition.

Inspection Report# : [2005004\(pdf\)](#)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

Last modified : November 30, 2005

Point Beach 2

4Q/2005 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Safety Evaluations on Safety Related Motors

A finding of very low safety significance was identified by the inspectors associated with the replacement of the 1P-10A residual heat removal pump (RHR) motor. A Non-Cited Violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," was identified for the failure to perform an equivalency evaluation for exceptions taken to motor specifications in the refurbishment of safety-related equipment. Specifically, the licensee failed to perform a technical evaluation for exceptions taken by the vendor to the licensee's motor specification for the 1P-10A RHR pump motor. Once identified, the licensee initiated a corrective action program document (CAP) to perform an engineering evaluation before placing 1P-10A in service. The licensee also initiated an extent of condition review to ensure that other equipment was not subject to the same issues..

The inspectors determined that the finding was greater than minor because it: (1) involved the design control attribute of the Mitigating Systems Cornerstone; and (2) affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using Inspection Manual Chapter 0609, Appendix G, Phase 1 Screening, and determined that Checklist 4, "PWR Refueling Operation: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," applied, specifically Section I.C, "Core Heat Removal Guidelines - Equipment." However, because the 'A' RHR loop was not in operation and the 'B' train RHR loop was operable and in operation with support systems available, the inspectors determined that Section I.C was not affected. Additionally, the finding did not meet the Checklist 4 criteria for Phase 2 or Phase 3 quantitative analysis because the finding did not: increase the likelihood of a loss of reactor coolant system (RCS) inventory, including a loss of RCS level instrumentation; degrade the licensee's ability to terminate a leak path or add RCS inventory when needed; or degrade the licensee's ability to recover decay heat removal once it was lost. The inspectors also determined that the finding was of very low safety significance because no event occurred that could be characterized as a loss of control as listed in Table 1 of Inspection Manual Chapter 0609, Appendix G. Therefore, the finding was considered to be of very low safety significance.

Inspection Report# : [2005013\(pdf\)](#)

Significance:  Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Design Verification Testing of SI 850 Valves

The inspectors identified a finding involving a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," having very low safety significance for failure to complete testing, to demonstrate that the containment sump isolation valves (SI-850s) would remain open during post loss of coolant accident containment recirculation. This finding was entered into the licensee's corrective action program.

This finding was more than minor significance, because it affected the design control; and the equipment performance attributes of the Mitigating Systems Cornerstone; and affected the equipment reliability objective for this cornerstone. Equipment reliability was affected because, as these valves begin to drift shut, the post loss of coolant accident recirculation flow would be affected and require operator actions to compensate for valve drift to ensure adequate long term core cooling. The inspectors answered "yes" to the question in the Mitigating Systems Cornerstone worksheet, which asked if the finding was a design or qualification deficiency, confirmed to not result in loss of function per Generic Letter 91-18. Therefore, the inspectors determined that this finding was a licensee performance deficiency of very low risk significance.

Inspection Report# : [2005013\(pdf\)](#)

Significance:  Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Corrective Actions for Potential Boric Acid Corrosion of SI-850 Valves

The inspectors identified a finding involving a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action"

having very low safety significance for failure to implement prompt corrective actions and inspect carbon steel hydraulic operating cylinder components on the 1(2) SI-850(A)(B) valve actuators after becoming aware of the nonconforming and potentially degraded conditions involving boric acid deposits and associated corrosion. The licensee implemented actions to clean up boric acid deposits and entered this finding into the corrective action program.

This finding was more than minor significance because absent NRC intervention, this issue could have become a more significant safety concern. Specifically, the licensee would have allowed an acidic environment (boric acid deposits) or aqueous environment (submerged fasteners) for these carbon steel components to continue for an indefinite period of time which could have resulted in corrosion induced failures of the SI-850 valve actuators and it affected the Mitigating Systems Cornerstone objective of equipment reliability. The inspectors answered "yes" to the question in the Mitigating Systems Cornerstone worksheet which asked if the finding was a design or qualification deficiency confirmed to not result in loss of function per Generic Letter 91-18. Therefore, the inspectors determined that this finding was a licensee performance deficiency of very low risk significance. The cause of the finding was related to the cross-cutting element of problem identification and resolution.

Inspection Report# : [2005013\(pdf\)](#)

G

Significance: Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Incorrect Performance of Static Lift Test of Valve 2SI-850B

The inspectors identified a finding involving a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control" having very low safety significance for failure to correctly perform a static lift test of the 2SI-850B valve. This test was designed to record the hydraulic actuator pressure necessary to overcome valve dead weight and packing friction. This finding was entered into the licensee's corrective action program.

This finding was more than minor significance because it affected the equipment performance attribute of the Mitigating Systems Cornerstone and affected the equipment reliability objective for this cornerstone. Equipment reliability was affected because, the incorrectly performed as-found static lift test of 2SI-850B, did not provide the information needed to demonstrate the functional capability of this degraded valve. Although no definitive test data existed, the licensee staff believed that this degraded valve would have been functional with the oil leak (400 milliliters lost per closing stroke) because it stroked only 0.5 seconds slow for its open acceptance time during the quarterly stroke test and enough oil existed in the hydraulic reservoir to allow at least 10 open/close cycles. Because the licensee did not consider the valve nonfunctional for past periods of operation with this hydraulic leak, the inspectors answered "yes" to the question in the Mitigating Systems Cornerstone worksheet which asked if the finding was a design or qualification deficiency confirmed to not result in loss of function per Generic Letter 91-18. Therefore, the inspectors determined that this finding was a licensee performance deficiency of very low risk significance.

Inspection Report# : [2005013\(pdf\)](#)

Significance: SL-IV Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Multiple Examples of the Failure to Notify the NRC Within 8 Hours as Required by 10 CFR 50.72

A finding of very low safety significance (with three examples) was identified by the inspectors for failure to notify the NRC within 8 hours in accordance with 10 CFR 50.72(b)(3)(ii)(B), following the identification that the nuclear power plant was in an unanalyzed condition that significantly degraded plant safety. Each occurrence was reported by the licensee following repeated questioning by the inspectors which occurred in April, September and November 2005. Following the November occurrence, the inspectors reviewed the licensee's previous causal evaluations and corrective actions. The inspectors noted that while the licensee had appropriately evaluated and initiated corrective actions for the technical issues in April and September 2005, the licensee had not appropriately evaluated or developed any corrective actions to address the failure to adequately report these issues to the NRC in a timely manner. Therefore, the inspectors also determined that a primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to appropriately evaluate and take adequate corrective actions for the reportability aspect of these issues.

Because this issue affects the NRC's ability to perform its regulatory function, it was evaluated using the traditional enforcement process. The inspectors determined that this violation is of very low safety significance and because the licensee entered the issue into their corrective action program (CAP068938), this violation is being treated as an NCV consistent with Section VI.A.1 of the NRC Enforcement Policy. The licensee has taken actions to perform a causal evaluation and address the knowledge, and procedural aspects of this finding.

Inspection Report# : [2005013\(pdf\)](#)

G

Significance: Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Promptly Correct Potential Crimping Vulnerability of AFW Recirculation Line

A Non-Cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," having very low safety significance was identified by the inspector. Specifically, the licensee failed to promptly correct a condition adverse to quality, the potential for the auxiliary feedwater (AFW) recirculation line to crimp during a design basis earthquake (DBE) or design basis tornado (DBT) event. The licensee missed prior opportunities to correct the adverse condition: 1) as a result of the two Red findings related to the AFW System, the licensee reviewed the

AFW system for the effects of high energy line break, DBE, and DBT events and identified crimping of the non-safety related portion of the common AFW recirculation line as a potential common mode failure; and 2) an external self-assessment in mid-2003 also concluded that crimping of the AFW recirculation line was credible and a potential common mode failure.

The licensee corrected this adverse condition by: 1) installing a pretested replacement for AFW pump recirculation line relief valve AF-4035 that was manufactured to meet ASME Code Section VIII requirements; and 2) having commitments to periodically replace AFW recirculation line relief valve AF-4035 with a pretested valve. These actions provided reasonable assurance that AF-4035 would provide the required flowpath to protect the AFW pumps if the AFW recirculation line crimped during a DBE or DBT event. The licensee planned to supplement CAP066199 to address the inadequate corrective actions.

The finding was more than minor because it affected the Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of systems that mitigate transients and the reactor accidents, and if left uncorrected, the finding could become a more significant safety concern. Specifically, if left uncorrected the AFW recirculation line relief valve could have deteriorated over time, failed to open as designed, and not provided the required recirculation line flowpath to protect the AFW pumps if the recirculation line crimped during a DBE or DBT event. The finding was of very low safety significance because testing of the original AFW recirculation line relief valve demonstrated that the relief valve would have opened as designed and would have provided the required AFW recirculation flowpath if the AFW recirculation line crimped during a DBE or DBT event. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to take adequate corrective actions.

Inspection Report# : [2005013\(pdf\)](#)

Significance: SL-IV Dec 16, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a 10 CFR 50.59 Evaluation for Compensatory Actions Associated with Letdown Line Automatic Isolation

The inspectors identified a Severity Level IV Non-Cited Violation of 10 CFR 50.59(d)(1) for the licensee's failure to perform a safety evaluation for compensatory actions taken for an activity associated with a degraded plant condition. Specifically, the licensee "screened out" an activity which replaced an automatic action for Chemical and Volume Control System (CVCS) letdown isolation on low pressurizer level with a manual action to isolate letdown on low pressurizer level, while replacing the Unit 2 pressurizer low level bistables with Unit 2 online at power. At the end of the inspection period, the licensee planned to perform a safety evaluation in accordance with 10 CFR Part 50.59 for the compensatory actions taken for the activity associated with the degraded plant condition.

Because the issue affected the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. The finding was determined to be more than minor because the inspectors, at the time of the inspection, could not reasonably determine that the UFSAR change, which adversely affected equipment important to safety, would not have ultimately required NRC approval. The inspectors evaluated the finding using IMC 0609, Appendix A, Phase 1 screening for the mitigating systems cornerstone and determined that the finding was of very low safety significance because the finding was not a design or qualification deficiency that was confirmed to result in a loss of operability or functionality per "Part 9900, Technical Guidance, Operability Determination Process for Operability and Functional Assessment."

Inspection Report# : [2005018\(pdf\)](#)

Significance:  Dec 16, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Apply Adequate Design Controls During Replacement of Service Water (SW) Valves SW-360 and SW-322

A self-revealed finding of very low safety significance was identified by the inspectors associated with a violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control." During replacement of the Service Water outlet valves for the Component Cooling Water (CCW) heat exchangers, the licensee failed to evaluate design differences between the original valves and the replacement valves. These differences led to the eventual failure of the stems in both valves.

The issue was more than minor because it affected the mitigating system cornerstone attribute of "Design Control." The finding screened as having very low significance (Green) using IMC 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for the At-Power Situations," because the inspectors answered "no" to all five questions under the Mitigating Systems Cornerstone column of the Phase 1 worksheet. While the design deficiency led to failure of the valves, the failures occurred during a plant shutdown; therefore, the valves would not have been required to function as designed.

Inspection Report# : [2005018\(pdf\)](#)

Significance:  Oct 06, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective Action Violation for Failure to Enter a Potential Condition Adverse to Quality into the Corrective Action Program

The team identified a Green Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for failure to enter into the corrective action program vendor information with the potential to degrade safety-related equipment. Specifically, in June 2005, no corrective action program document was written after the licensee was notified by the reactor head vendor about potential problems resulting from the method of storage in the containment. The licensee subsequently entered the issue into its corrective action program. As part of the

corrective actions, the licensee counseled plant personnel in the reactor head replacement project about the need to enter such issues into the corrective action program.

This finding was more than minor because a more significant safety concern could occur if similar vendor issues were not entered into the corrective action program. The finding was of very low safety significance because the vendor subsequently determined that the head storage had been acceptable, no safety function was lost, no Technical Specification train or maintenance rule safety function was lost, and there were no external event concerns. The inspectors also determined that a primary cause of this finding was related to the cross-cutting aspect of problem identification and resolution in the area of identification, because the licensee failed to promptly identify a condition adverse to quality.

Inspection Report# : [2005012\(pdf\)](#)

G

Significance: Oct 06, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Design Control Violation for Failure to Incorporate Diesel Information into Procedures

The team identified a Green Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure, from around 1994 to the date of the inspection, to translate emergency diesel generator licensing and design bases into emergency and abnormal operating procedures. One emergency operating procedure and one abnormal operating procedure on each unit did not contain the diesel generator ratings and directed operators to place loads on the diesel generators that could exceed the licensing basis load limit. The licensee subsequently entered the issue into its corrective action program. As part of the corrective actions, the licensee revised the procedures to incorporate the appropriate information.

This finding was more than minor because it involved the design control attribute of the Mitigating Systems cornerstone and affected the cornerstone objective. Exceeding the licensing basis limit for diesel generator loading could affect the capability of the diesel generator to respond to a design basis accident, concurrent with a loss of offsite power and a single failure. The finding was of very low safety significance because this was a design deficiency with no loss of safety function

Inspection Report# : [2005012\(pdf\)](#)

G

Significance: Oct 06, 2005

Identified By: NRC

Item Type: FIN Finding

Inadequate Extent-of-Condition Evaluation for an Inadequate Abnormal Operating Procedure

The team identified a Green finding for the failure, in around July 2005, to perform an adequate extent-of-condition review following problems with auxiliary feedwater local control stations. After the apparent cause evaluation determined ineffective procedure validation had occurred, the extent-of-condition review did not check other procedures for similar problems. The licensee subsequently entered the issue into its corrective action program. As part of the corrective actions, the licensee was reviewing other procedures for similar problems.

This finding was more than minor because if left uncorrected, it could eventually result in failing to promptly identify conditions adverse to quality. The finding was of very low safety significance because no safety function was lost, no technical specification train or maintenance rule safety function was lost, and there were no external event concerns. The inspectors also determined that a primary cause of this finding was related to the cross-cutting aspect of problem identification and resolution in the area of evaluation, because the licensee failed to adequately evaluate a condition adverse to quality.

Inspection Report# : [2005012\(pdf\)](#)

G

Significance: Sep 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective Action Violation for Untimely Repair of Emergency Diesel Generator Cooling System Endbells With Microbiologically-Induced Corrosion

The inspectors identified a Green finding with an associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to take adequate corrective action for microbiologically-induced corrosion (MIC) of the endbells of the service water cooling system of the G-01 emergency diesel generator (EDG). Specifically, significant wastage caused by MIC, on the EDG endbells was identified in 2001 and work orders were written to replace the endbells. However, as of March 20, 2005, the endbells were not replaced which resulted in a self-revealed through-wall leak from MIC on an endbell, requiring the diesel to be removed from service to effect repairs. The licensee took immediate corrective actions to replace the endbell, followed by replacement of other susceptible EDG endbells. In addition, the licensee proposed changes to the predictive maintenance program to better identify potential sources of MIC corrosion in service water system components.

The issue was more than minor because the finding was associated with the equipment performance attribute of the Mitigating System cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. In addition, if left uncorrected, the finding could have become a more significant safety concern. The finding was determined to be of very low safety significance because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the Technical Specification allowed outage time, and no risk due to external

events. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to take adequate corrective actions.

Inspection Report# : [2005010\(pdf\)](#)

G

Significance: Sep 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Technical Specification Violation for Inoperable Emergency Diesel Generator Because of Mispositioned Room Exhaust Fan Breaker

The inspectors identified a Green finding with an associated Non-Cited Violation of Technical Specification 3.8.1.E for the self-revealed problem on August 7, 2005, when one of the required room exhaust fans for the G-01 EDG failed to start due to a mispositioned breaker. The licensee returned the breaker to the proper position and investigated the cause of the mispositioning. The licensee planned and had taken additional corrective actions to provide clarification for aborting a procedure or scheduled activity and for ensuring equipment was appropriately returned to service.

The finding was more than minor, in that, it was associated with the configuration control attribute of the Mitigating System cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low safety significance because it did not involve a design deficiency, there was no actual loss of safety function, no single train loss of safety function for greater than the Technical Specification (TS)-allowed outage time, and no risk due to external events. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of human performance, because the licensee failed to ensure that the appropriate conditions were established after completion and cancellation of maintenance activities and before re-aligning G-01 to the safeguards bus.

Inspection Report# : [2005010\(pdf\)](#)

G

Significance: Sep 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Technical Specification Violation for Lack of a Procedure for Tripping Failed Loss-of-Voltage Relays

The inspectors identified a Green finding with an associated Non-Cited Violation of Technical Specification 5.4.1 for the failure to have a procedure to trip a loss-of-voltage time delay relay, a specific and foreseen potential malfunction, after the time delay function of the channel had failed. Specifically, on August 17, 2005, relay 1-62-3/A-06, associated with one channel of the 4160-Volt loss-of-voltage time delay function of the loss of offsite power EDG start and load sequence instrumentation, failed during calibration and testing. The licensee was not able to place the channel in trip in one hour (as required by TSs) due to not having an established procedure for performing this activity. The licensee took immediate corrective actions to correct the condition by replacing the time delay relay. In addition, at the end of the inspection period, the licensee planned additional evaluations and corrective actions to ensure the capability of performing the Technical Specification Action Condition within the required time frame.

The finding was more than minor, in that, it was associated with the procedure quality attribute of the Mitigating System cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low risk significance because it did not involve a design deficiency, there was no actual loss of safety function, no single train loss of safety function for greater than the TS-allowed outage time, and no risk due to external events.

Inspection Report# : [2005010\(pdf\)](#)

G

Significance: Aug 19, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedure for Starting Motor-Driven AFW Pumps for Certain Control Room Evacuations

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed on July 19, 2005, for the failure to have an appropriate procedure to assure proper operation of the motor-driven auxiliary feedwater (AFW) minimum recirculation valves when operating the AFW system from outside the control room using local panels N-01 and N-02. As a result, if operators had performed AOP-10, "Control Room Inaccessibility," Revision 3, during an event, minimum recirculation valves AF-4007 and AF-4014 would not have opened when the AFW pumps were locally started with the discharge valves closed. This could have caused pump damage within one to two minutes.

The issue was more than minor because the finding was associated with the configuration control attribute of the Mitigating Systems cornerstone and adversely impacted the cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix A, which indicated that a Phase 2 evaluation was necessary. However, because procedure AOP-10 was used when the control room was evacuated with no Appendix R fire and no other accident conditions, a Phase 3 evaluation was performed. The issue was characterized as Green based on the low initiating event frequency (evacuation of the control room for reasons other than an Appendix R fire) coupled with the accident mitigation available from the turbine-driven AFW pumps and feed and bleed capability. The licensee took prompt corrective action to revise procedure AOP-10.

Inspection Report# : [2005011\(pdf\)](#)

Significance: SL-IV Aug 19, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

No 50.59 Safety Evaluation for a 2002 Modification to AFW

The inspectors identified a Severity Level IV, Non-Cited Violation of 10 CFR 50.59(d)(1) for the licensee's failure in September 2002 to perform a safety evaluation of the removal of the internals of the auxiliary feedwater (AFW) common recirculation line check valve, AF-117. Specifically, the licensee 'screened out' adverse changes made concerning the function and operation of all four AFW pumps. In this case, an automatic passive design feature of the AFW recirculation line piping was being made unavailable and the function was being changed to operation of an untested, nonsafety-related, active component--the AFW common recirculation line relief valve AF-4035--and it was being supplemented through the use of manual operator actions. This change warranted a 10 CFR 50.59 safety evaluation to determine if the changes met the criteria requiring a licensee amendment.

Because the issue potentially affected the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. This finding was determined to be more than minor because the inspectors could not reasonably determine that the original change would have ultimately required NRC approval. The inspectors completed a Significance Determination Review using IMC 0609, Appendix A "Significance Determination of Reactor Inspection Findings for At Power Situations." Using the Phase 1 Screening worksheet the finding was determined to be of very low safety significance (Green) since the finding did not represent an actual loss of safety function for greater than the Technical Specification allowed outage time. Comparing this item to the examples in NUREG 1600, Supplement I, this finding is similar to Item D.5, "Violations of 10 CFR 50.59 that do not involve circumstances in which a change that required prior Commission approval would not be found acceptable had the approval been sought." As a result, the issue was considered to be of very low safety significance and was dispositioned as a Severity Level IV, Non-Cited Violation (NCV).

Inspection Report# : [2005011\(pdf\)](#)

G

Significance: Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadvertent Loss of Decay Heat Removal Capability

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the failure to verify the appropriate residual heat removal (RHR) system lineup prior to the issuance of a tagging order. As a result, upon implementation of the tagging order, the licensee also failed to maintain cooling for the Unit 2 reactor coolant system (RCS) in accordance with licensee procedures. Specifically, on April 19, 2005, the licensee performed a tagout on the 'B' train of safety injection while the 'B' RHR heat exchanger was in service and inadvertently isolated flow through the 'B' RHR heat exchanger, causing a loss of RHR for approximately 40 minutes.

The inspectors determined that a primary cause of this finding was related to the cross-cutting area of Human Performance, because the licensee failed to verify the appropriate conditions were established for implementation of the tagout.

The issue was more than minor because the finding was associated with the configuration control attribute of the Mitigating Systems cornerstone and adversely impacted the cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix G, Phase 1 Screening, Checklist 4, "Pressurized Water Reactor (PWR) Refueling Operations: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," specifically, Section I.C, "Core Heat Removal Guidelines - Equipment," was applicable to this finding. The finding affected the RHR loop which was operable and in operation; however, the finding did not meet the requirements for a Phase 2 or Phase 3 analysis per Appendix G. Therefore the finding was determined to be of very low significance. The licensee took prompt action to enter the item into the corrective action process, develop and implement interim corrective actions and evaluate the issues to develop additional corrective actions.

Inspection Report# : [2005004\(pdf\)](#)

G

Significance: Jun 30, 2005

Identified By: NRC

Item Type: FIN Finding

Adverse Trend of Failure to Ensure Causal Evaluations for Conditions Adverse to Quality for which Operability Recommendations were Performed

The inspectors identified a finding of very low significance (Green) for an adverse trend of failures to perform causal evaluations for conditions adverse to quality which only received operability recommendations, to ensure the cause of the conditions were identified and corrected. The licensee further evaluated the issue and corroborated the adverse trend, and in addition identified the issue potentially extended to condition reports documenting conditions adverse to quality with only maintenance rule evaluations performed. No violation of NRC requirements occurred.

The inspectors also determined that the primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution, because the licensee failed to perform causal evaluations commensurate with the significance of the condition reports to ensure the conditions adverse to quality were identified and corrected.

The issue was more than minor because the underlying issues associated with the finding were associated with the equipment performance and

design control attributes of the Mitigating Systems cornerstone and adversely impacted the cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix A, Phase 1 screening for the Mitigating Systems cornerstone and determined the finding was of very low significance. The licensee took action to enter the item into the corrective action process and develop interim corrective actions. At the end of the inspection period, the licensee had not completed the evaluation of the finding.

Inspection Report# : [2005004\(pdf\)](#)

G

Significance: Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadvertent Refueling Water Storage Tank Inventory Loss

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed when an inadvertent inventory loss from the Unit 2 refueling water storage tank occurred. The inventory loss occurred when licensee personnel performed two procedures concurrently, which was not appropriate to the circumstances due to the equipment configuration conflicts created by performing the test procedures in this manner.

The inspectors determined that the primary cause of this finding was related to the cross-cutting area of Human Performance, because the licensee failed to appropriately validate and verify the procedures could be performed concurrently.

The issue was more than minor because the finding was associated with the configuration control and procedure quality attributes of the Mitigating Systems cornerstone and adversely impacted the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent core damage. The inspectors evaluated the finding using IMC 0609, Appendix G, Phase 1 Screening, Checklist 4, "PWR Refueling Operations: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," specifically Section II.C, "Inventory Control Guidelines-Equipment," was applicable to this finding. The inspectors determined the finding affected equipment necessary for makeup to the refueling cavity; however, the finding did not meet the requirements for a Phase 2 or Phase 3 analysis per Appendix G. Therefore the finding was determined to be of very low significance. The licensee took prompt action to enter the item into the corrective action process, evaluate the issues and develop corrective actions to address the causes of this finding.

Inspection Report# : [2005004\(pdf\)](#)

G

Significance: Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Multiple Design Calculation Errors of Very Low Safety Significance

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors. Specifically, the licensee failed to apply design control measures to verify the adequacy of the design for the head assembly upgrade package (HAUP) associated with the replacement reactor vessel closure head. Specifically, design calculations that support the HAUP design basis contained errors, including the failure to specify the American Institute of Steel Construction (AISC) or American Society of Mechanical Engineers Boiler and Pressure Vessel Code minimum fillet weld size requirements, the failure to transform bolt design loads into the analysis bolt pattern coordinate system, and the failure to evaluate the control rod drive mechanism cooling duct as a slender component in accordance with Appendix B5 of the AISC design code.

The finding was more than minor because if left uncorrected the finding could become a more significant safety concern. Specifically, failure to specify the AISC or American Society of Mechanical Engineers Code required minimum fillet weld size, or failure to transform bolt design loads into the analysis bolt pattern coordinate system, or failure to evaluate slender section components in accordance with AISC Appendix B5 in similar design calculations could result in modifications that exceed licensing basis design acceptance limits. The finding was of very low safety significance because the calculation errors in these instances did not result in an HAUP structure or component to exceed its design basis acceptance limit. The licensee took prompt action to enter the item into the corrective action process, evaluate the issues and develop corrective actions to address the causes of this finding.

Inspection Report# : [2005004\(pdf\)](#)

G

Significance: Mar 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Emergency Diesel Generator Fuel Oil Filters in Duplex

A Green finding associated with a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified by the inspectors for the failure to take corrective actions for a condition adverse to quality. The inspectors noted that in March 2003, corrective action program document CAP031641 was written to assess the licensee's operational practice of having the two fuel oil duplex strainers on each of the four emergency diesel generators set to dual filter mode instead of single mode. The assessment concluded that the optimal position was single mode because it allowed changing the filter elements with the emergency diesel generator running. The dual filter mode required the emergency diesel generator to be stopped to change the filters. In January 2004, CAP031641 was closed with no actions taken to address this condition adverse to quality.

The inspectors also determined that the primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to take any corrective actions to correct this condition adverse to quality.

This issue was more than minor because if left uncorrected the finding could become a more significant safety concern. In addition, the finding affected the Mitigating Systems cornerstone attributes of configuration control and equipment performance. The inspectors evaluated the finding using NRC Inspection Manual Chapter IMC 0609, Appendix A, Phase 1 screening for the Mitigating Systems cornerstone and determined that the finding was of very low safety significance because it was not a design or qualification deficiency that was confirmed to result in a loss of function per Generic Letter 91-18.

Inspection Report# : [2005003\(pdf\)](#)

G

Significance: Feb 27, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedure Delays Return of Battery Charger

A finding of very low safety significance was self-revealed for a violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for an Abnormal Operating Procedure (AOP) that was not adequate for returning safety-related battery chargers to an operable status. Specifically, on February 27, 2005, an offsite line experienced a fault and became disconnected, causing a momentary phase-to-phase short and then a continuous open circuit. The transient caused a loss of power to all in-service safety-related battery chargers. Three of the four chargers were restored using the AOP, but one battery charger could not be promptly restored to service because the AOP was inadequate. The licensee took prompt action to enter the item into the corrective action process and change the procedure.

The inspectors concluded that the finding was more than minor because if left uncorrected the item could become a more significant safety concern, and it was associated with the procedure quality attribute of the Mitigating Systems cornerstone. The finding was considered to be of very low safety significance since the finding did not involve a design or qualification deficiency, did not represent a loss of safety function, and did not involve an external initiating event.

Inspection Report# : [2005003\(pdf\)](#)

G

Significance: Feb 16, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Air Leak On AFW Recirculation Flow Control Valve

A finding of very low safety significance associated with a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings" was identified by the inspectors. The finding was associated with an air leak that inspectors found on an air supply fitting to the minimum flow recirculation control valve for the Unit 2 turbine-driven auxiliary feedwater (TDAFW) pump. The licensee determined that the leak most likely resulted when a fitting was inadvertently loosened during maintenance. Post-maintenance testing did not detect the loose fitting. Following discovery of the leak by the inspectors 6 days after the maintenance, the licensee entered the issue into its corrective action program, declared the TDAFW pump for Unit 2 inoperable, and repaired the leak.

The inspectors determined that the primary cause of this finding was related to the cross-cutting area of human performance, because the licensee failed to ensure that post-maintenance testing was adequately conducted for the component.

This issue is more than minor because it impacted the operability of a component in the Mitigating Systems cornerstone and affected the objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was screened through the Phase II screening in the Significance Determination Process (SDP) of Inspection Manual Chapter (IMC) 0609, Appendix A, "Determining the Significance of Reactor Inspection Findings for At Power Situations," since the component was impacted for greater than the Limiting Condition for Operation. The findings was determine to be of very low safety significance based on the review. This finding was a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings."

Inspection Report# : [2005003\(pdf\)](#)

R

Significance: Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

Apparent violation of 10 CFR Part 50, Appendix B, Criterion III, for the failure to establish the appropriate design control measures for the installation of orifices to the AFW recirculation lines

An apparent violation was identified, in part, through a self-revealing event when decreased auxiliary feedwater pump recirculation flow was noted during post-maintenance testing. Subsequent licensee and NRC review of the event determined that the licensee had installed incorrectly designed orifices in each of the pump recirculation lines. The orifices, due to small clearances, were susceptible to plugging. The primary causes of this finding were inadequacies in the licensee's design process and the licensee's implementation of the process, including the identification of system design requirements and the development of supporting safety evaluations.

The issue has been preliminarily determined to have high safety significance (Red). Following installation of the inadequately designed orifices, the entire auxiliary feedwater system was susceptible to a common mode failure during operations using service water. Failure of

auxiliary feedwater during several initiating events could lead to core damage. The installation of the incorrectly designed orifices in the recirculation lines is an apparent violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

On December 11, 2003, the final significance determination letter was issued for this finding. It was determined that this is a RED finding for Unit 2 and a YELLOW finding for Unit 1. For tracking purposes, identical findings were opened for Unit 1 (designated as YELLOW) and Unit 2 (designated as RED).

Inspection Report# : [2002015\(pdf\)](#)

Significance: N/A Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

The failure to identify the root cause and implement corrective actions for the AFW/IA issue, a significant condition adverse to quality, so as to prevent recurrence.

A violation was identified for the licensee's failure to implement adequate corrective actions to effectively address a previous Red finding and preclude recurrence (Inspection Report 50-266/01-17; 50-301/01-17). Specifically, the licensee failed to identify potential common mode failures that existed involving power supplies to the recirculation line air-operated valve and other system components. In addition, the licensee's corrective actions for the potential common mode failure associated with a loss of instrument air did not preclude repetition. Specifically, the licensee's corrective actions, to upgrade the safety function of the air-operated recirculation valve, failed to ensure that successful operation of the recirculation line air-operated valve was dependent only on safety-related support systems. Following the corrective actions, successful operation of the valve was still dependent upon nonsafety-related power to an interposing relay. Additionally, the corrective actions failed to discover a single failure mechanism involving a system orifice modification.

The issue was more than minor because the failure to implement appropriate corrective actions resulted in the auxiliary feedwater system continuing to rely on nonsafety-related support systems and to be susceptible to a single event causing a total system failure. The failure of nonsafety-related support systems and single event failures are an expected condition during several design basis accidents and should not cause a safety system to fail. The failure of the licensee to implement adequate corrective actions is a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action."

This violation is associated with a previously identified RED finding (IR 50-266;50-30/01-17).

Inspection Report# : [2002015\(pdf\)](#)

R

Significance: Feb 28, 2002

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002.

Inspection Report 50-266/02-15; 50-301/02-15, issued April 2, 2003, documented the NRC decision that this finding is not an Old Design Issue.

Inspection Report# : [2001017\(pdf\)](#)

Inspection Report# : [2003003\(pdf\)](#)

Barrier Integrity

Significance: SL-IV Dec 16, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Updated Final Safety Analysis Report Change to Replace ASME Class II, Seismic Class I, Piping with a Freeze Seal

The inspectors identified a Severity Level IV Non-Cited Violation associated with the failure to perform an adequate safety evaluation review as required by 10 CFR 50.59 for changes made to the facility as described in the UFSAR. In their safety evaluation, EVAL 2004-003, the licensee failed to provide a basis for the determination that on-line repairs to the excess letdown line with a freeze seal in place as a boundary

for Reactor Coolant System (RCS) effluent from the Reactor Coolant Pumps (RCPs) was acceptable without a license amendment. Specifically, for this freeze seal evolution, the licensee would have replaced the American Society of Mechanical Engineers (ASME) Class II, Seismic Class I piping in the excess letdown line with a freeze plug while the plant was still on-line. Within the 10 CFR 50.59 evaluation, the licensee failed to provide a basis for why this freeze seal evolution did not present more than a minimal increase in the likelihood of occurrence of a malfunction of a Structure, System and Component (SSC) important to safety.

Because the issue affected the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. The finding was determined to be more than minor because the inspectors could not reasonably determine that the UFSAR change, which adversely affected equipment important to safety, would not have ultimately required NRC approval. The finding was determined to be of very low safety significance (Green), because the inspectors answered "no" to all three questions under the Containment Barriers Cornerstone column of the Phase 1 worksheet.

Inspection Report# : [2005018\(pdf\)](#)

G

Significance: Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement Adequate Corrective Actions to Preclude Repetition of a Significant Condition Adverse to Quality

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to take adequate corrective action to preclude repetition of a significant condition adverse to quality was identified by the inspectors. Specifically, the licensee identified that the root cause of an April 9, 2004, potential loss of a hot leg vent path during nozzle dam installation, a failure to adequately identify, track and maintain licensee commitments to Generic Letter 88-17 in plant procedures, a significant condition adverse to quality. Prior to the start of the Unit 2 Refueling Outage, the inspectors identified that the approved outage shutdown safety analysis contained an orange risk path, during which the licensee would have been unable to close the containment equipment hatch within the time to boil the water around the fuel. The licensee's root cause evaluation for this issue identified the root cause was the same as the April 2004 event; therefore, the licensee's corrective actions from the April 2004 event failed to preclude repetition of the identified cause. The licensee took prompt corrective action to remove these planned activities from the outage schedule to ensure the equipment hatch was closed when the reactor coolant system (RCS) was breached; however, the licensee also identified in the root cause evaluation that this configuration actually occurred in the 1999 Unit 1 Refueling Outage.

The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution, because the licensee failed to take adequate corrective actions to preclude repetition of a significant condition adverse to quality.

The issue was more than minor because the finding was associated with preserving the containment boundary attribute of the Barrier Integrity cornerstone and affected the cornerstone objective of providing reasonable assurance that the physical design barriers (Containment) protect the public from radionuclide releases cause by accidents or events. The inspectors evaluated the finding using IMC 0609, Appendix G, Phase 1 Screening, Checklist 3, "PWR Cold Shutdown and Refueling Operation RCS Open and Refueling Cavity Level <23'," specifically Section IV, "Containment Control Guidelines." The finding dealt with the procedures and training to close containment prior to core boiling when the RCS was open. The finding did not meet any of the criteria requiring a Phase 2 or 3 Analysis per Appendix G, Checklist 3, specifically findings that degrade the ability of containment to remain intact following a severe accident. This was in part due to the type of RCS system breach which was scheduled. Therefore, the finding was determined to be of very low significance. The licensee took prompt action to enter the item into the corrective action process, evaluate the issues and develop corrective actions to address the causes of this finding to preclude repetition.

Inspection Report# : [2005004\(pdf\)](#)

Emergency Preparedness

W

Significance: Dec 16, 2005

Identified By: NRC

Item Type: VIO Violation

Observation and Review of Emergency Preparedness Drill, August 1, 2002

On December 16, 2005, the staff issued a WHITE finding and NOV of 10 CFR 50.47. The WHITE finding was associated with the failure to self-identify the untimely declaration of an Alert classification during an August 2002 Emergency Preparedness drill. The inspection finding was assessed using the Significance Determination Process and was preliminarily characterized as WHITE.

In a January, 2006 telephone call, the licensee was informed that the NRC would be taking a one-time deviation from the Action Matrix process. Normally, a supplemental 95001 inspection would be performed after a WHITE finding is determined; however, in this case, the effectiveness of the licensee's corrective actions to improve the capability to identify, track, and resolve critique items associated with EP drills and exercises was demonstrated with no findings or PIs greater than GREEN identified by NRC since August 2003. Additionally, both individuals involved with providing inaccurate information had their employments terminated on December 20, 2002. The WHITE finding will not be considered indicative of current performance in the EP cornerstone, and will not be considered in formulating a regulatory course of action should a new WHITE finding occur in the EP cornerstone.

Inspection Report# : [2002010\(pdf\)](#)

Inspection Report# : [2005017\(pdf\)](#)

Significance: SL-III Nov 30, 2005

Identified By: NRC

Item Type: VIO Violation

Failure to Provide Complete and Accurate Information from August 1, 2002 EP drill

On December 16, 2005, the staff proposed a severity level III NOV of 10 CFR 50.9, and \$60,000 civil penalty. The violation involved inaccurate information provided to the NRC associated with a critique of the August 2002 EP drill.

In summary, on or about November 20, 2002, the licensee provided the Commission with information that was not complete and accurate in all material respects, concerning the results of post-drill critiques of an August 1, 2002 EP drill. Specifically, during an NRC inspection, the former Point Beach EP Manager provided NRC inspectors with a "Drill and Exercise Performance - Performance Indicator Evaluation Form", which indicated that the licensee had self-identified an untimely declaration of an Alert classification during the post-drill critique. In fact, the licensee had not identified the drill weakness during the August 2002 critique. The original document was date August 2, 2002, and stated that the licensee had declared the Alert classification 5 minutes after plant parameters reached the Emergency Action Level, and within the 15 minute limit. However, on or about November 15, 2002, the former EP Manager and former EP Coordinator altered the document to indicate that the Alert classification was made after the 15 minute limit had been exceeded. The EP Manager and former EP Coordinator also backdated the document to August 23, 2002, in order to give the appearance that the licensee, and not the NRC, had identified the drill weakness. Information on the "Drill and Exercise Performance - Performance Indicator Evaluation Form" is material to the NRC as it is used to determine whether weaknesses during an EP drill are identified, evaluated and corrected. The actions of the former EP Manager and former EP Coordinator, both licensee officials, resulted in the submission of materially inaccurate information to both NMC and the NRC, a violation of 10 CFR 50.9. The violation is categorized in accordance with the NRC Enforcement Policy at Severity Level III (EA-05-191). Additionally, the actions of the former EP Manager and former EP Coordinator were deliberate and violated 10 CFR 50.5, "Deliberate Misconduct." Inspection Report# : [2005017\(pdf\)](#)

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

Last modified : March 03, 2006

Point Beach 2

1Q/2006 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Mar 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Maintain Leak Detection Capability

The inspectors identified a non-cited violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) for the failure to maintain the design basis and configuration control for the detection of recirculation system leakage from the containment sump isolation valve cylinders (valves SI-850A and SI-850B for Units 1 and 2). This issue was initially identified by the inspectors during walkdowns and reviews of the containment sump recirculation piping in November/December 2005; however, at that time, the issue was not recognized by the licensee as part of the design basis of the facility. During a review of a request for additional information from the Office of Nuclear Reactor Regulation regarding a November 8, 2005, 10 CFR 50.72 report, the licensee subsequently determined that, in fact, leakage detection of the containment sump isolation valve cylinders through the pipe sleeve into the auxiliary building was part of the system's design and licensing basis.

At the end of the inspection, the licensee had not completed a causal evaluation; however, several interim actions were in place to address the operable, but non-conforming condition. The licensee had established a corrective action to determine how to resolve this non-conforming issue.

The inspectors concluded that this finding is greater than minor because it was associated with the design control and the equipment performance attributes of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding is a design or qualification deficiency confirmed to not result in loss of function per NRC Generic Letter 91-18. Therefore, the inspectors determined that this finding is a licensee performance deficiency of very low risk significance (Green).

Inspection Report# : [2006002\(pdf\)](#)

Significance:  Mar 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Maintain Safety Function for SI-850 Valves in the Closed Direction

The inspectors identified a non-cited violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) for the failure to ensure the safety function of the containment sump isolation valves was maintained and tested in accordance with the design and licensing basis. This issue was initially identified by the inspectors during walkdowns and reviews of the containment sump recirculation piping in November/December 2005; however, at that time, the issue was not recognized by the licensee as part of the design and licensing basis of the facility. The licensee subsequently determined that the design and licensing basis for the closed safety function of these valves was not properly implemented in accordance with the facility's license and required codes or standards.

The licensee performed a causal evaluation and developed several interim and long-term corrective actions. Those corrective actions included: revision of the inservice testing program documents for testing the valves; revision of the design basis document (DBD) for the residual heat removal system; reinforcement of the expectations with engineering staff on the use of DBDs and inservice testing background documents; and development of a project plan to update the inservice test background document.

The inspectors concluded that this finding is greater than minor because it was associated with the design control, equipment performance and maintenance and testing procedure quality attributes of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding is a design or qualification deficiency confirmed to not result in a loss of function per NRC Generic Letter 91-18. Therefore, the inspectors determined that this finding is a licensee performance deficiency of very low risk significance.

Inspection Report# : [2006002\(pdf\)](#)

Significance:  Mar 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Address Effects of Elevated Temperatures on control Room Instruments

The inspectors identified a non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) when the licensee failed to consider the effects of elevated control room temperatures on instrument inaccuracies following a design basis loss-of-coolant accident, which could potentially affect mitigation of the event. During the Problem Identification and Resolution Inspection documented in NRC Inspection Report 2005012, the inspectors identified an unresolved item (URI) related to the effects of elevated control room temperatures on instrument accuracies and accident mitigation during a design basis loss of coolant accident. Subsequent review and root cause evaluation determined that the licensee had failed to consider the effects of elevated control room temperatures on instrument inaccuracies for a calculation associated with the reconstitution project.

The licensee entered the issue in its corrective action system and performed a root cause analysis. Corrective actions to prevent recurrence included strengthening review requirements for the 30 percent, 60 percent and Owner Acceptance Review of vendor-supplied calculations for the calculation reconstitution project.

The inspectors concluded that the finding was greater than minor, as the finding represented a programmatic deficiency associated with the calculation reconstitution project that, if left uncorrected, would become a more significant concern due to calculation errors. The design deficiency did not result in a loss of function per Generic Letter 91-18 as sufficient emergency diesel generators remained available through administrative controls to provide electrical power for operators to promptly restart the control room ventilation system, hence the finding screened as very low safety significance (Green).

Inspection Report# : [2006002\(pdf\)](#)

G

Significance: Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Safety Evaluations on Safety Related Motors

A finding of very low safety significance was identified by the inspectors associated with the replacement of the 1P-10A residual heat removal pump (RHR) motor. A Non-Cited Violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," was identified for the failure to perform an equivalency evaluation for exceptions taken to motor specifications in the refurbishment of safety-related equipment. Specifically, the licensee failed to perform a technical evaluation for exceptions taken by the vendor to the licensee's motor specification for the 1P-10A RHR pump motor. Once identified, the licensee initiated a corrective action program document (CAP) to perform an engineering evaluation before placing 1P-10A in service. The licensee also initiated an extent of condition review to ensure that other equipment was not subject to the same issues..

The inspectors determined that the finding was greater than minor because it: (1) involved the design control attribute of the Mitigating Systems Cornerstone; and (2) affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using Inspection Manual Chapter 0609, Appendix G, Phase 1 Screening, and determined that Checklist 4, "PWR Refueling Operation: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," applied, specifically Section I.C, "Core Heat Removal Guidelines - Equipment." However, because the 'A' RHR loop was not in operation and the 'B' train RHR loop was operable and in operation with support systems available, the inspectors determined that Section I.C was not affected. Additionally, the finding did not meet the Checklist 4 criteria for Phase 2 or Phase 3 quantitative analysis because the finding did not: increase the likelihood of a loss of reactor coolant system (RCS) inventory, including a loss of RCS level instrumentation; degrade the licensee's ability to terminate a leak path or add RCS inventory when needed; or degrade the licensee's ability to recover decay heat removal once it was lost. The inspectors also determined that the finding was of very low safety significance because no event occurred that could be characterized as a loss of control as listed in Table 1 of Inspection Manual Chapter 0609, Appendix G. Therefore, the finding was considered to be of very low safety significance.

Inspection Report# : [2005013\(pdf\)](#)

G

Significance: Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Design Verification Testing of SI 850 Valves

The inspectors identified a finding involving a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," having very low safety significance for failure to complete testing, to demonstrate that the containment sump isolation valves (SI-850s) would remain open during post loss of coolant accident containment recirculation. This finding was entered into the licensee's corrective action program.

This finding was more than minor significance, because it affected the design control; and the equipment performance attributes of the Mitigating Systems Cornerstone; and affected the equipment reliability objective for this cornerstone. Equipment reliability was affected because, as these valves begin to drift shut, the post loss of coolant accident recirculation flow would be affected and require operator actions to compensate for valve drift to ensure adequate long term core cooling. The inspectors answered "yes" to the question in the Mitigating Systems Cornerstone worksheet, which asked if the finding was a design or qualification deficiency, confirmed to not result in loss of function per Generic Letter 91-18. Therefore, the inspectors determined that this finding was a licensee performance deficiency of very low risk significance.

Inspection Report# : [2005013\(pdf\)](#)

G**Significance:** Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Corrective Actions for Potential Boric Acid Corrosion of SI-850 Valves

The inspectors identified a finding involving a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action" having very low safety significance for failure to implement prompt corrective actions and inspect carbon steel hydraulic operating cylinder components on the 1(2) SI-850(A)(B) valve actuators after becoming aware of the nonconforming and potentially degraded conditions involving boric acid deposits and associated corrosion. The licensee implemented actions to clean up boric acid deposits and entered this finding into the corrective action program.

This finding was more than minor significance because absent NRC intervention, this issue could have become a more significant safety concern. Specifically, the licensee would have allowed an acidic environment (boric acid deposits) or aqueous environment (submerged fasteners) for these carbon steel components to continue for an indefinite period of time which could have resulted in corrosion induced failures of the SI-850 valve actuators and it affected the Mitigating Systems Cornerstone objective of equipment reliability. The inspectors answered "yes" to the question in the Mitigating Systems Cornerstone worksheet which asked if the finding was a design or qualification deficiency confirmed to not result in loss of function per Generic Letter 91-18. Therefore, the inspectors determined that this finding was a licensee performance deficiency of very low risk significance. The cause of the finding was related to the cross-cutting element of problem identification and resolution.

Inspection Report# : [2005013\(pdf\)](#)**G****Significance:** Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Incorrect Performance of Static Lift Test of Valve 2SI-850B

The inspectors identified a finding involving a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control" having very low safety significance for failure to correctly perform a static lift test of the 2SI-850B valve. This test was designed to record the hydraulic actuator pressure necessary to overcome valve dead weight and packing friction. This finding was entered into the licensee's corrective action program.

This finding was more than minor significance because it affected the equipment performance attribute of the Mitigating Systems Cornerstone and affected the equipment reliability objective for this cornerstone. Equipment reliability was affected because, the incorrectly performed as-found static lift test of 2SI-850B, did not provide the information needed to demonstrate the functional capability of this degraded valve. Although no definitive test data existed, the licensee staff believed that this degraded valve would have been functional with the oil leak (400 milliliters lost per closing stroke) because it stroked only 0.5 seconds slow for its open acceptance time during the quarterly stroke test and enough oil existed in the hydraulic reservoir to allow at least 10 open/close cycles. Because the licensee did not consider the valve nonfunctional for past periods of operation with this hydraulic leak, the inspectors answered "yes" to the question in the Mitigating Systems Cornerstone worksheet which asked if the finding was a design or qualification deficiency confirmed to not result in loss of function per Generic Letter 91-18. Therefore, the inspectors determined that this finding was a licensee performance deficiency of very low risk significance.

Inspection Report# : [2005013\(pdf\)](#)**Significance: SL-IV** Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Multiple Examples of the Failure to Notify the NRC Within 8 Hours as Required by 10 CFR 50.72

A finding of very low safety significance (with three examples) was identified by the inspectors for failure to notify the NRC within 8 hours in accordance with 10 CFR 50.72(b)(3)(ii)(B), following the identification that the nuclear power plant was in an unanalyzed condition that significantly degraded plant safety. Each occurrence was reported by the licensee following repeated questioning by the inspectors which occurred in April, September and November 2005. Following the November occurrence, the inspectors reviewed the licensee's previous causal evaluations and corrective actions. The inspectors noted that while the licensee had appropriately evaluated and initiated corrective actions for the technical issues in April and September 2005, the licensee had not appropriately evaluated or developed any corrective actions to address the failure to adequately report these issues to the NRC in a timely manner. Therefore, the inspectors also determined that a primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to appropriately evaluate and take adequate corrective actions for the reportability aspect of these issues.

Because this issue affects the NRC's ability to perform its regulatory function, it was evaluated using the traditional enforcement process. The inspectors determined that this violation is of very low safety significance and because the licensee entered the issue into their corrective action program (CAP068938), this violation is being treated as an NCV consistent with Section VI.A.1 of the NRC Enforcement Policy. The licensee has taken actions to perform a causal evaluation and address the knowledge, and procedural aspects of this finding.

Inspection Report# : [2005013\(pdf\)](#)**G****Significance:** Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Promptly Correct Potential Crimping Vulnerability of AFW Recirculation Line

A Non-Cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," having very low safety significance was identified by the inspector. Specifically, the licensee failed to promptly correct a condition adverse to quality, the potential for the auxiliary feedwater (AFW) recirculation line to crimp during a design basis earthquake (DBE) or design basis tornado (DBT) event. The licensee missed prior opportunities to correct the adverse condition: 1) as a result of the two Red findings related to the AFW System, the licensee reviewed the AFW system for the effects of high energy line break, DBE, and DBT events and identified crimping of the non-safety related portion of the common AFW recirculation line as a potential common mode failure; and 2) an external self-assessment in mid-2003 also concluded that crimping of the AFW recirculation line was credible and a potential common mode failure.

The licensee corrected this adverse condition by: 1) installing a pretested replacement for AFW pump recirculation line relief valve AF-4035 that was manufactured to meet ASME Code Section VIII requirements; and 2) having commitments to periodically replace AFW recirculation line relief valve AF-4035 with a pretested valve. These actions provided reasonable assurance that AF-4035 would provide the required flowpath to protect the AFW pumps if the AFW recirculation line crimped during a DBE or DBT event. The licensee planned to supplement CAP066199 to address the inadequate corrective actions.

The finding was more than minor because it affected the Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of systems that mitigate transients and the reactor accidents, and if left uncorrected, the finding could become a more significant safety concern. Specifically, if left uncorrected the AFW recirculation line relief valve could have deteriorated over time, failed to open as designed, and not provided the required recirculation line flowpath to protect the AFW pumps if the recirculation line crimped during a DBE or DBT event. The finding was of very low safety significance because testing of the original AFW recirculation line relief valve demonstrated that the relief valve would have opened as designed and would have provided the required AFW recirculation flowpath if the AFW recirculation line crimped during a DBE or DBT event. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to take adequate corrective actions.

Inspection Report# : [2005013\(pdf\)](#)

Significance: SL-IV Dec 16, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a 10 CFR 50.59 Evaluation for Compensatory Actions Associated with Letdown Line Automatic Isolation

The inspectors identified a Severity Level IV Non-Cited Violation of 10 CFR 50.59(d)(1) for the licensee's failure to perform a safety evaluation for compensatory actions taken for an activity associated with a degraded plant condition. Specifically, the licensee "screened out" an activity which replaced an automatic action for Chemical and Volume Control System (CVCS) letdown isolation on low pressurizer level with a manual action to isolate letdown on low pressurizer level, while replacing the Unit 2 pressurizer low level bistables with Unit 2 online at power. At the end of the inspection period, the licensee planned to perform a safety evaluation in accordance with 10 CFR Part 50.59 for the compensatory actions taken for the activity associated with the degraded plant condition.

Because the issue affected the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. The finding was determined to be more than minor because the inspectors, at the time of the inspection, could not reasonably determine that the UFSAR change, which adversely affected equipment important to safety, would not have ultimately required NRC approval. The inspectors evaluated the finding using IMC 0609, Appendix A, Phase 1 screening for the mitigating systems cornerstone and determined that the finding was of very low safety significance because the finding was not a design or qualification deficiency that was confirmed to result in a loss of operability or functionality per "Part 9900, Technical Guidance, Operability Determination Process for Operability and Functional Assessment."

Inspection Report# : [2005018\(pdf\)](#)

G

Significance: Dec 16, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Apply Adequate Design Controls During Replacement of Service Water (SW) Valves SW-360 and SW-322

A self-revealed finding of very low safety significance was identified by the inspectors associated with a violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control." During replacement of the Service Water outlet valves for the Component Cooling Water (CCW) heat exchangers, the licensee failed to evaluate design differences between the original valves and the replacement valves. These differences led to the eventual failure of the stems in both valves.

The issue was more than minor because it affected the mitigating system cornerstone attribute of "Design Control." The finding screened as having very low significance (Green) using IMC 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for the At-Power Situations," because the inspectors answered "no" to all five questions under the Mitigating Systems Cornerstone column of the Phase 1 worksheet. While the design deficiency led to failure of the valves, the failures occurred during a plant shutdown; therefore, the valves would not have been required to function as designed.

Inspection Report# : [2005018\(pdf\)](#)

G

Significance: Oct 06, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective Action Violation for Failure to Enter a Potential Condition Adverse to Quality into the Corrective Action Program

The team identified a Green Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for failure to enter into the corrective action program vendor information with the potential to degrade safety-related equipment. Specifically, in June 2005, no corrective action program document was written after the licensee was notified by the reactor head vendor about potential problems resulting from the method of storage in the containment. The licensee subsequently entered the issue into its corrective action program. As part of the corrective actions, the licensee counseled plant personnel in the reactor head replacement project about the need to enter such issues into the corrective action program.

This finding was more than minor because a more significant safety concern could occur if similar vendor issues were not entered into the corrective action program. The finding was of very low safety significance because the vendor subsequently determined that the head storage had been acceptable, no safety function was lost, no Technical Specification train or maintenance rule safety function was lost, and there were no external event concerns. The inspectors also determined that a primary cause of this finding was related to the cross-cutting aspect of problem identification and resolution in the area of identification, because the licensee failed to promptly identify a condition adverse to quality.

Inspection Report# : [2005012\(pdf\)](#)

G

Significance: Oct 06, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Design Control Violation for Failure to Incorporate Diesel Information into Procedures

The team identified a Green Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure, from around 1994 to the date of the inspection, to translate emergency diesel generator licensing and design bases into emergency and abnormal operating procedures. One emergency operating procedure and one abnormal operating procedure on each unit did not contain the diesel generator ratings and directed operators to place loads on the diesel generators that could exceed the licensing basis load limit. The licensee subsequently entered the issue into its corrective action program. As part of the corrective actions, the licensee revised the procedures to incorporate the appropriate information.

This finding was more than minor because it involved the design control attribute of the Mitigating Systems cornerstone and affected the cornerstone objective. Exceeding the licensing basis limit for diesel generator loading could affect the capability of the diesel generator to respond to a design basis accident, concurrent with a loss of offsite power and a single failure. The finding was of very low safety significance because this was a design deficiency with no loss of safety function

Inspection Report# : [2005012\(pdf\)](#)

G

Significance: Oct 06, 2005

Identified By: NRC

Item Type: FIN Finding

Inadequate Extent-of-Condition Evaluation for an Inadequate Abnormal Operating Procedure

The team identified a Green finding for the failure, in around July 2005, to perform an adequate extent-of-condition review following problems with auxiliary feedwater local control stations. After the apparent cause evaluation determined ineffective procedure validation had occurred, the extent-of-condition review did not check other procedures for similar problems. The licensee subsequently entered the issue into its corrective action program. As part of the corrective actions, the licensee was reviewing other procedures for similar problems.

This finding was more than minor because if left uncorrected, it could eventually result in failing to promptly identify conditions adverse to quality. The finding was of very low safety significance because no safety function was lost, no technical specification train or maintenance rule safety function was lost, and there were no external event concerns. The inspectors also determined that a primary cause of this finding was related to the cross-cutting aspect of problem identification and resolution in the area of evaluation, because the licensee failed to adequately evaluate a condition adverse to quality.

Inspection Report# : [2005012\(pdf\)](#)

G

Significance: Sep 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective Action Violation for Untimely Repair of Emergency Diesel Generator Cooling System Endbells With Microbiologically-Induced Corrosion

The inspectors identified a Green finding with an associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to take adequate corrective action for microbiologically-induced corrosion (MIC) of the endbells of the service water cooling system of the G-01 emergency diesel generator (EDG). Specifically, significant wastage caused by MIC, on the EDG endbells was identified in 2001 and work orders were written to replace the endbells. However, as of March 20, 2005, the endbells were not replaced which resulted in a self-revealed through-wall leak from MIC on an endbell, requiring the diesel to be removed from service to effect repairs. The licensee took immediate corrective actions to replace the endbell, followed by replacement of other susceptible EDG endbells. In addition, the licensee proposed changes to the predictive maintenance program to better identify potential sources of MIC corrosion in service water system components.

The issue was more than minor because the finding was associated with the equipment performance attribute of the Mitigating System cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. In addition, if left uncorrected, the finding could have become a more significant safety concern. The finding was determined to be of very low safety significance because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the Technical Specification allowed outage time, and no risk due to external events. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to take adequate corrective actions.

Inspection Report# : [2005010\(pdf\)](#)

G

Significance: Sep 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Technical Specification Violation for Inoperable Emergency Diesel Generator Because of Mispositioned Room Exhaust Fan Breaker

The inspectors identified a Green finding with an associated Non-Cited Violation of Technical Specification 3.8.1.E for the self-revealed problem on August 7, 2005, when one of the required room exhaust fans for the G-01 EDG failed to start due to a mispositioned breaker. The licensee returned the breaker to the proper position and investigated the cause of the mispositioning. The licensee planned and had taken additional corrective actions to provide clarification for aborting a procedure or scheduled activity and for ensuring equipment was appropriately returned to service.

The finding was more than minor, in that, it was associated with the configuration control attribute of the Mitigating System cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low safety significance because it did not involve a design deficiency, there was no actual loss of safety function, no single train loss of safety function for greater than the Technical Specification (TS)-allowed outage time, and no risk due to external events. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of human performance, because the licensee failed to ensure that the appropriate conditions were established after completion and cancellation of maintenance activities and before re-aligning G-01 to the safeguards bus.

Inspection Report# : [2005010\(pdf\)](#)

G

Significance: Sep 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Technical Specification Violation for Lack of a Procedure for Tripping Failed Loss-of-Voltage Relays

The inspectors identified a Green finding with an associated Non-Cited Violation of Technical Specification 5.4.1 for the failure to have a procedure to trip a loss-of-voltage time delay relay, a specific and foreseen potential malfunction, after the time delay function of the channel had failed. Specifically, on August 17, 2005, relay 1-62-3/A-06, associated with one channel of the 4160-Volt loss-of-voltage time delay function of the loss of offsite power EDG start and load sequence instrumentation, failed during calibration and testing. The licensee was not able to place the channel in trip in one hour (as required by TSs) due to not having an established procedure for performing this activity. The licensee took immediate corrective actions to correct the condition by replacing the time delay relay. In addition, at the end of the inspection period, the licensee planned additional evaluations and corrective actions to ensure the capability of performing the Technical Specification Action Condition within the required time frame.

The finding was more than minor, in that, it was associated with the procedure quality attribute of the Mitigating System cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low risk significance because it did not involve a design deficiency, there was no actual loss of safety function, no single train loss of safety function for greater than the TS-allowed outage time, and no risk due to external events.

Inspection Report# : [2005010\(pdf\)](#)

G

Significance: Aug 19, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedure for Starting Motor-Driven AFW Pumps for Certain Control Room Evacuations

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed on July 19, 2005, for the failure to have an appropriate procedure to assure proper operation of the motor-driven auxiliary feedwater (AFW) minimum recirculation valves when operating the AFW system from outside the control room using local panels N-01 and N-02. As a result, if operators had performed AOP-10, "Control Room Inaccessibility," Revision 3, during an event, minimum recirculation valves AF-4007 and AF-4014 would not have opened when the AFW pumps were locally started with the discharge valves closed. This could have caused pump damage within one to two minutes.

The issue was more than minor because the finding was associated with the configuration control attribute of the Mitigating Systems cornerstone and adversely impacted the cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix A, which indicated that

a Phase 2 evaluation was necessary. However, because procedure AOP-10 was used when the control room was evacuated with no Appendix R fire and no other accident conditions, a Phase 3 evaluation was performed. The issue was characterized as Green based on the low initiating event frequency (evacuation of the control room for reasons other than an Appendix R fire) coupled with the accident mitigation available from the turbine-driven AFW pumps and feed and bleed capability. The licensee took prompt corrective action to revise procedure AOP-10. Inspection Report# : [2005011\(pdf\)](#)

Significance: SL-IV Aug 19, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

No 50.59 Safety Evaluation for a 2002 Modification to AFW

The inspectors identified a Severity Level IV, Non-Cited Violation of 10 CFR 50.59(d)(1) for the licensee's failure in September 2002 to perform a safety evaluation of the removal of the internals of the auxiliary feedwater (AFW) common recirculation line check valve, AF-117. Specifically, the licensee 'screened out' adverse changes made concerning the function and operation of all four AFW pumps. In this case, an automatic passive design feature of the AFW recirculation line piping was being made unavailable and the function was being changed to operation of an untested, nonsafety-related, active component--the AFW common recirculation line relief valve AF-4035--and it was being supplemented through the use of manual operator actions. This change warranted a 10 CFR 50.59 safety evaluation to determine if the changes met the criteria requiring a licensee amendment.

Because the issue potentially affected the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. This finding was determined to be more than minor because the inspectors could not reasonably determine that the original change would have ultimately required NRC approval. The inspectors completed a Significance Determination Review using IMC 0609, Appendix A "Significance Determination of Reactor Inspection Findings for At Power Situations." Using the Phase 1 Screening worksheet the finding was determined to be of very low safety significance (Green) since the finding did not represent an actual loss of safety function for greater than the Technical Specification allowed outage time. Comparing this item to the examples in NUREG 1600, Supplement I, this finding is similar to Item D.5, "Violations of 10 CFR 50.59 that do not involve circumstances in which a change that required prior Commission approval would not be found acceptable had the approval been sought." As a result, the issue was considered to be of very low safety significance and was dispositioned as a Severity Level IV, Non-Cited Violation (NCV).

Inspection Report# : [2005011\(pdf\)](#)

G

Significance: Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadvertent Loss of Decay Heat Removal Capability

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the failure to verify the appropriate residual heat removal (RHR) system lineup prior to the issuance of a tagging order. As a result, upon implementation of the tagging order, the licensee also failed to maintain cooling for the Unit 2 reactor coolant system (RCS) in accordance with licensee procedures. Specifically, on April 19, 2005, the licensee performed a tagout on the 'B' train of safety injection while the 'B' RHR heat exchanger was in service and inadvertently isolated flow through the 'B' RHR heat exchanger, causing a loss of RHR for approximately 40 minutes.

The inspectors determined that a primary cause of this finding was related to the cross-cutting area of Human Performance, because the licensee failed to verify the appropriate conditions were established for implementation of the tagout.

The issue was more than minor because the finding was associated with the configuration control attribute of the Mitigating Systems cornerstone and adversely impacted the cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix G, Phase 1 Screening, Checklist 4, "Pressurized Water Reactor (PWR) Refueling Operations: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," specifically, Section I.C, "Core Heat Removal Guidelines - Equipment," was applicable to this finding. The finding affected the RHR loop which was operable and in operation; however, the finding did not meet the requirements for a Phase 2 or Phase 3 analysis per Appendix G. Therefore the finding was determined to be of very low significance. The licensee took prompt action to enter the item into the corrective action process, develop and implement interim corrective actions and evaluate the issues to develop additional corrective actions.

Inspection Report# : [2005004\(pdf\)](#)

G

Significance: Jun 30, 2005

Identified By: NRC

Item Type: FIN Finding

Adverse Trend of Failure to Ensure Causal Evaluations for Conditions Adverse to Quality for which Operability Recommendations were Performed

The inspectors identified a finding of very low significance (Green) for an adverse trend of failures to perform causal evaluations for conditions adverse to quality which only received operability recommendations, to ensure the cause of the conditions were identified and corrected. The licensee further evaluated the issue and corroborated the adverse trend, and in addition identified the issue potentially extended to condition reports documenting conditions adverse to quality with only maintenance rule evaluations performed. No violation of NRC requirements occurred.

The inspectors also determined that the primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution, because the licensee failed to perform causal evaluations commensurate with the significance of the condition reports to ensure the conditions adverse to quality were identified and corrected.

The issue was more than minor because the underlying issues associated with the finding were associated with the equipment performance and design control attributes of the Mitigating Systems cornerstone and adversely impacted the cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix A, Phase 1 screening for the Mitigating Systems cornerstone and determined the finding was of very low significance. The licensee took action to enter the item into the corrective action process and develop interim corrective actions. At the end of the inspection period, the licensee had not completed the evaluation of the finding.

Inspection Report# : [2005004\(pdf\)](#)

G

Significance: Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadvertent Refueling Water Storage Tank Inventory Loss

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed when an inadvertent inventory loss from the Unit 2 refueling water storage tank occurred. The inventory loss occurred when licensee personnel performed two procedures concurrently, which was not appropriate to the circumstances due to the equipment configuration conflicts created by performing the test procedures in this manner.

The inspectors determined that the primary cause of this finding was related to the cross-cutting area of Human Performance, because the licensee failed to appropriately validate and verify the procedures could be performed concurrently.

The issue was more than minor because the finding was associated with the configuration control and procedure quality attributes of the Mitigating Systems cornerstone and adversely impacted the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent core damage. The inspectors evaluated the finding using IMC 0609, Appendix G, Phase 1 Screening, Checklist 4, "PWR Refueling Operations: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," specifically Section II.C, "Inventory Control Guidelines-Equipment," was applicable to this finding. The inspectors determined the finding affected equipment necessary for makeup to the refueling cavity; however, the finding did not meet the requirements for a Phase 2 or Phase 3 analysis per Appendix G. Therefore the finding was determined to be of very low significance. The licensee took prompt action to enter the item into the corrective action process, evaluate the issues and develop corrective actions to address the causes of this finding.

Inspection Report# : [2005004\(pdf\)](#)

G

Significance: Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Multiple Design Calculation Errors of Very Low Safety Significance

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors. Specifically, the licensee failed to apply design control measures to verify the adequacy of the design for the head assembly upgrade package (HAUP) associated with the replacement reactor vessel closure head. Specifically, design calculations that support the HAUP design basis contained errors, including the failure to specify the American Institute of Steel Construction (AISC) or American Society of Mechanical Engineers Boiler and Pressure Vessel Code minimum fillet weld size requirements, the failure to transform bolt design loads into the analysis bolt pattern coordinate system, and the failure to evaluate the control rod drive mechanism cooling duct as a slender component in accordance with Appendix B5 of the AISC design code.

The finding was more than minor because if left uncorrected the finding could become a more significant safety concern. Specifically, failure to specify the AISC or American Society of Mechanical Engineers Code required minimum fillet weld size, or failure to transform bolt design loads into the analysis bolt pattern coordinate system, or failure to evaluate slender section components in accordance with AISC Appendix B5 in similar design calculations could result in modifications that exceed licensing basis design acceptance limits. The finding was of very low safety significance because the calculation errors in these instances did not result in an HAUP structure or component to exceed its design basis acceptance limit. The licensee took prompt action to enter the item into the corrective action process, evaluate the issues and develop corrective actions to address the causes of this finding.

Inspection Report# : [2005004\(pdf\)](#)

R

Significance: Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

Apparent violation of 10 CFR Part 50, Appendix B, Criterion III, for the failure to establish the appropriate design control measures for the installation of orifices to the AFW recirculation lines

An apparent violation was identified, in part, through a self-revealing event when decreased auxiliary feedwater pump recirculation flow was

noted during post-maintenance testing. Subsequent licensee and NRC review of the event determined that the licensee had installed incorrectly designed orifices in each of the pump recirculation lines. The orifices, due to small clearances, were susceptible to plugging. The primary causes of this finding were inadequacies in the licensee's design process and the licensee's implementation of the process, including the identification of system design requirements and the development of supporting safety evaluations.

The issue has been preliminarily determined to have high safety significance (Red). Following installation of the inadequately designed orifices, the entire auxiliary feedwater system was susceptible to a common mode failure during operations using service water. Failure of auxiliary feedwater during several initiating events could lead to core damage. The installation of the incorrectly designed orifices in the recirculation lines is an apparent violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

On December 11, 2003, the final significance determination letter was issued for this finding. It was determined that this is a RED finding for Unit 2 and a YELLOW finding for Unit 1. For tracking purposes, identical findings were opened for Unit 1 (designated as YELLOW) and Unit 2 (designated as RED).

Inspection Report# : [2002015\(pdf\)](#)

Significance: N/A Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

The failure to identify the root cause and implement corrective actions for the AFW/IA issue, a significant condition adverse to quality, so as to prevent recurrence.

A violation was identified for the licensee's failure to implement adequate corrective actions to effectively address a previous Red finding and preclude recurrence (Inspection Report 50-266/01-17; 50-301/01-17). Specifically, the licensee failed to identify potential common mode failures that existed involving power supplies to the recirculation line air-operated valve and other system components. In addition, the licensee's corrective actions for the potential common mode failure associated with a loss of instrument air did not preclude repetition. Specifically, the licensee's corrective actions, to upgrade the safety function of the air-operated recirculation valve, failed to ensure that successful operation of the recirculation line air-operated valve was dependent only on safety-related support systems. Following the corrective actions, successful operation of the valve was still dependent upon nonsafety-related power to an interposing relay. Additionally, the corrective actions failed to discover a single failure mechanism involving a system orifice modification.

The issue was more than minor because the failure to implement appropriate corrective actions resulted in the auxiliary feedwater system continuing to rely on nonsafety-related support systems and to be susceptible to a single event causing a total system failure. The failure of nonsafety-related support systems and single event failures are an expected condition during several design basis accidents and should not cause a safety system to fail. The failure of the licensee to implement adequate corrective actions is a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action."

This violation is associated with a previously identified RED finding (IR 50-266;50-30/01-17).

Inspection Report# : [2002015\(pdf\)](#)

R

Significance: Feb 28, 2002

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002.

Inspection Report 50-266/02-15; 50-301/02-15, issued April 2, 2003, documented the NRC decision that this finding is not an Old Design Issue.

Inspection Report# : [2001017\(pdf\)](#)

Inspection Report# : [2003003\(pdf\)](#)

Significance: SL-IV Dec 16, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Updated Final Safety Analysis Report Change to Replace ASME Class II, Seismic Class I, Piping with a Freeze Seal

The inspectors identified a Severity Level IV Non-Cited Violation associated with the failure to perform an adequate safety evaluation review as required by 10 CFR 50.59 for changes made to the facility as described in the UFSAR. In their safety evaluation, EVAL 2004-003, the licensee failed to provide a basis for the determination that on-line repairs to the excess letdown line with a freeze seal in place as a boundary for Reactor Coolant System (RCS) effluent from the Reactor Coolant Pumps (RCPs) was acceptable without a license amendment. Specifically, for this freeze seal evolution, the licensee would have replaced the American Society of Mechanical Engineers (ASME) Class II, Seismic Class I piping in the excess letdown line with a freeze plug while the plant was still on-line. Within the 10 CFR 50.59 evaluation, the licensee failed to provide a basis for why this freeze seal evolution did not present more than a minimal increase in the likelihood of occurrence of a malfunction of a Structure, System and Component (SSC) important to safety.

Because the issue affected the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. The finding was determined to be more than minor because the inspectors could not reasonably determine that the UFSAR change, which adversely affected equipment important to safety, would not have ultimately required NRC approval. The finding was determined to be of very low safety significance (Green), because the inspectors answered "no" to all three questions under the Containment Barriers Cornerstone column of the Phase 1 worksheet.

Inspection Report# : [2005018\(pdf\)](#)

G

Significance: Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement Adequate Corrective Actions to Preclude Repetition of a Significant Condition Adverse to Quality

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to take adequate corrective action to preclude repetition of a significant condition adverse to quality was identified by the inspectors. Specifically, the licensee identified that the root cause of an April 9, 2004, potential loss of a hot leg vent path during nozzle dam installation, a failure to adequately identify, track and maintain licensee commitments to Generic Letter 88-17 in plant procedures, a significant condition adverse to quality. Prior to the start of the Unit 2 Refueling Outage, the inspectors identified that the approved outage shutdown safety analysis contained an orange risk path, during which the licensee would have been unable to close the containment equipment hatch within the time to boil the water around the fuel. The licensee's root cause evaluation for this issue identified the root cause was the same as the April 2004 event; therefore, the licensee's corrective actions from the April 2004 event failed to preclude repetition of the identified cause. The licensee took prompt corrective action to remove these planned activities from the outage schedule to ensure the equipment hatch was closed when the reactor coolant system (RCS) was breached; however, the licensee also identified in the root cause evaluation that this configuration actually occurred in the 1999 Unit 1 Refueling Outage.

The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution, because the licensee failed to take adequate corrective actions to preclude repetition of a significant condition adverse to quality.

The issue was more than minor because the finding was associated with preserving the containment boundary attribute of the Barrier Integrity cornerstone and affected the cornerstone objective of providing reasonable assurance that the physical design barriers (Containment) protect the public from radionuclide releases cause by accidents or events. The inspectors evaluated the finding using IMC 0609, Appendix G, Phase 1 Screening, Checklist 3, "PWR Cold Shutdown and Refueling Operation RCS Open and Refueling Cavity Level <23'," specifically Section IV, "Containment Control Guidelines." The finding dealt with the procedures and training to close containment prior to core boiling when the RCS was open. The finding did not meet any of the criteria requiring a Phase 2 or 3 Analysis per Appendix G, Checklist 3, specifically findings that degrade the ability of containment to remain intact following a severe accident. This was in part due to the type of RCS system breach which was scheduled. Therefore, the finding was determined to be of very low significance. The licensee took prompt action to enter the item into the corrective action process, evaluate the issues and develop corrective actions to address the causes of this finding to preclude repetition.

Inspection Report# : [2005004\(pdf\)](#)

Emergency Preparedness

W

Significance: Dec 16, 2005

Identified By: NRC

Item Type: VIO Violation

Observation and Review of Emergency Preparedness Drill, August 1, 2002

On December 16, 2005, the staff issued a WHITE finding and NOV of 10 CFR 50.47. The WHITE finding was associated with the failure to self-identify the untimely declaration of an Alert classification during an August 2002 Emergency Preparedness drill. The inspection finding was assessed using the Significance Determination Process and was preliminarily characterized as WHITE.

In a January, 2006 telephone call, the licensee was informed that the NRC would be taking a one-time deviation from the Action Matrix

process. Normally, a supplemental 95001 inspection would be performed after a WHITE finding is determined; however, in this case, the effectiveness of the licensee's corrective actions to improve the capability to identify, track, and resolve critique items associated with EP drills and exercises was demonstrated with no findings or PIs greater than GREEN identified by NRC since August 2003. Additionally, both individuals involved with providing inaccurate information had their employments terminated on December 20, 2002. The WHITE finding will not be considered indicative of current performance in the EP cornerstone, and will not be considered in formulating a regulatory course of action should a new WHITE finding occur in the EP cornerstone.

Inspection Report# : [2002010\(pdf\)](#)

Inspection Report# : [2005017\(pdf\)](#)

Significance: SL-III Nov 30, 2005

Identified By: NRC

Item Type: VIO Violation

Failure to Provide Complete and Accurate Information from August 1, 2002 EP drill

On December 16, 2005, the staff proposed a severity level III NOV of 10 CFR 50.9, and \$60,000 civil penalty. The violation involved inaccurate information provided to the NRC associated with a critique of the August 2002 EP drill.

In summary, on or about November 20, 2002, the licensee provided the Commission with information that was not complete and accurate in all material respects, concerning the results of post-drill critiques of an August 1, 2002 EP drill. Specifically, during an NRC inspection, the former Point Beach EP Manager provided NRC inspectors with a "Drill and Exercise Performance - Performance Indicator Evaluation Form", which indicated that the licensee had self-identified an untimely declaration of an Alert classification during the post-drill critique. In fact, the licensee had not identified the drill weakness during the August 2002 critique. The original document was dated August 2, 2002, and stated that the licensee had declared the Alert classification 5 minutes after plant parameters reached the Emergency Action Level, and within the 15 minute limit. However, on or about November 15, 2002, the former EP Manager and former EP Coordinator altered the document to indicate that the Alert classification was made after the 15 minute limit had been exceeded. The EP Manager and former EP Coordinator also backdated the document to August 23, 2002, in order to give the appearance that the licensee, and not the NRC, had identified the drill weakness. Information on the "Drill and Exercise Performance - Performance Indicator Evaluation Form" is material to the NRC as it is used to determine whether weaknesses during an EP drill are identified, evaluated and corrected. The actions of the former EP Manager and former EP Coordinator, both licensee officials, resulted in the submission of materially inaccurate information to both NRC and the NRC, a violation of 10 CFR 50.9. The violation is categorized in accordance with the NRC Enforcement Policy at Severity Level III (EA-05-191). Additionally, the actions of the former EP Manager and former EP Coordinator were deliberate and violated 10 CFR 50.5, "Deliberate Misconduct." Inspection Report# : [2005017\(pdf\)](#)

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

Last modified : May 25, 2006

Point Beach 2

2Q/2006 Plant Inspection Findings

Initiating Events

G

Significance: Jun 30, 2006

Identified By: NRC

Item Type: FIN Finding

Failure to Take Adequate Actions for Potential High Wind Conditions

A finding of very low safety significance was identified by the inspectors for failure to control loose materials in the protected area in the vicinity of the main and auxiliary transformers. No violation of NRC requirements occurred. Failure to take action to remove loose material in the protected area has problem identification and resolution cross-cutting aspects involving failure of assigned personnel to identify and correct potential tornado missiles that could be generated from such loose material in the vicinity of the main and auxiliary transformers. Once identified, the licensee initiated a corrective action program document to develop a surveillance procedure to remove loose materials before summer months when potential adverse weather was possible, performed walkdowns of the affected areas, and removed material which could become a potential hazard in high velocity winds and tornadoes.

The inspectors determined that the finding was more than minor because, if left uncorrected, the loose items adjacent to the main and auxiliary transformers would become a more significant safety concern. The issue is of very low safety significance because the finding did not contribute to the likelihood of a primary or secondary system loss of coolant accident initiator; the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available; and the finding did not increase the likelihood of a fire or internal or external flooding. The issue is not considered a violation of regulatory requirements because the finding did not affect safety-related structures, systems, or components.

Inspection Report# : [2006004\(pdf\)](#)

Mitigating Systems

G

Significance: Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a 50.59 Evaluation for Compensatory Measures Described in Operability Recommendation

The inspectors identified a Severity Level IV, Non-Cited Violation of 10 CFR 50.59(d)(1) for the licensee's failure to perform an evaluation for compensatory actions taken to maintain the closed function of the emergency core cooling system (ECCS) containment sump isolation valves. Specifically, the licensee established compensatory actions in the event remote operation from the control room of the containment sump recirculation isolation valves (1SI-850A, 1SI-850B, 2SI-850A and 2SI-850B) was ineffective during plant minimum or degraded voltage conditions. The licensee had not completed a causal evaluation by the end of the inspection period; however, remedial corrective actions to address certain aspects of this issue had been implemented.

Because violations of 10 CFR 50.59 affect the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. In accordance with the NRC Enforcement Policy, this finding is determined to be more than minor because there was a reasonable likelihood that the change requiring the 10 CFR 50.59 evaluation would require NRC review and approval prior to implementation. This finding has been reviewed by NRC management and is determined to be a Green finding, of very low safety significance.

Inspection Report# : [2006004\(pdf\)](#)G

Significance: Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain and Implement Adequate Procedures for Control Room Ventilation Testing

The inspectors identified a Non-Cited Violation of Technical Specification 5.4.1 for the failure to have adequately established, implemented, and maintained procedures for Technical Specification Surveillance testing of the control room emergency filtration system. The inspectors observed the performance of the 18-month surveillance for testing of the control room emergency filtration system, per procedure HPIP-115.4. The inspectors noted that the visual inspection, charcoal sampling, collection of the fan flow data, and the compilation/evaluation of fan flow measurement data were conducted but not as specified in the procedure.

The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of problem identification and resolution. The last performance of this test, conducted 18 months prior, revealed numerous performance deficiencies, which included an inadequate procedure

and the failure to properly implement portions of the procedure. However, the corrective actions taken for the deficiencies identified during the last performance failed to correct the procedure maintenance and implementation issues associated with procedure HPIP-11.54. The licensee had not completed a causal evaluation by the end of the inspection period; however, the licensee had implemented remedial corrective actions to address certain aspects of this issue.

The inspectors concluded that the finding is greater than minor because it is associated with the procedure quality attribute for maintenance and testing (pre-event) procedures of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated this finding using the significance determination process and determined that this finding is a licensee performance deficiency of very low risk significance (Green).

Inspection Report# : [2006004\(pdf\)](#)



Significance: Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Update and Maintain the Final Safety Analysis Report as Required by 10 CFR 50.71(e)

The inspectors identified a Severity Level IV, Non-Cited Violation of 10 CFR Part 50.71(e) for the self-revealed failure to update the Final Safety Analysis Report (FSAR) to assure that the information in the report was the latest information developed and contained all changes necessary to reflect information and analyses submitted to the NRC. This finding was self-revealed following the inspectors' identification of numerous FSAR inaccuracies concerning licensee responses to generic docketed correspondence to the commission. This was further corroborated by a follow-up licensee self-assessment and streaming analysis conducted by the licensee. As a result, the licensee initiated a root cause evaluation which also identified the failure to update the FSAR in response to licensee credited actions, new NRC regulations, programmatic licensee commitments, and certain license amendment safety evaluation reports.

The inspectors determined that a primary cause of the finding was related to the cross-cutting element of human performance due to the failure to have processes and procedures to maintain the current licensing basis and a lack of knowledge by plant staff of regulatory requirements. The licensee has taken immediate remedial corrective actions to address several issues, including the development of a site policy and procedures which defined the current licensing basis. In addition, the licensee has planned comprehensive corrective actions, including a detailed project scope to update the FSAR.

Because violations of 10 CFR 50.71(e) affect the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. In accordance with the NRC Enforcement Policy, this finding is determined to be more than minor because a failure to update the FSAR could have had a material impact on safety or licensed activities. This finding has been reviewed by NRC management and is determined to be a Green finding, of very low safety significance.

Inspection Report# : [2006004\(pdf\)](#)



Significance: Mar 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Maintain Leak Detection Capability

The inspectors identified a non-cited violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) for the failure to maintain the design basis and configuration control for the detection of recirculation system leakage from the containment sump isolation valve cylinders (valves SI-850A and SI-850B for Units 1 and 2). This issue was initially identified by the inspectors during walkdowns and reviews of the containment sump recirculation piping in November/December 2005; however, at that time, the issue was not recognized by the licensee as part of the design basis of the facility. During a review of a request for additional information from the Office of Nuclear Reactor Regulation regarding a November 8, 2005, 10 CFR 50.72 report, the licensee subsequently determined that, in fact, leakage detection of the containment sump isolation valve cylinders through the pipe sleeve into the auxiliary building was part of the system's design and licensing basis.

At the end of the inspection, the licensee had not completed a causal evaluation; however, several interim actions were in place to address the operable, but non-conforming condition. The licensee had established a corrective action to determine how to resolve this non-conforming issue.

The inspectors concluded that this finding is greater than minor because it was associated with the design control and the equipment performance attributes of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding is a design or qualification deficiency confirmed to not result in loss of function per NRC Generic Letter 91-18. Therefore, the inspectors determined that this finding is a licensee performance deficiency of very low risk significance (Green).

Inspection Report# : [2006002\(pdf\)](#)



Significance: Mar 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Maintain Safety Function for SI-850 Valves in the Closed Direction

The inspectors identified a non-cited violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) for the failure to ensure the safety function of the containment sump isolation valves was maintained and tested in accordance with the

design and licensing basis. This issue was initially identified by the inspectors during walkdowns and reviews of the containment sump recirculation piping in November/December 2005; however, at that time, the issue was not recognized by the licensee as part of the design and licensing basis of the facility. The licensee subsequently determined that the design and licensing basis for the closed safety function of these valves was not properly implemented in accordance with the facility's license and required codes or standards.

The licensee performed a causal evaluation and developed several interim and long-term corrective actions. Those corrective actions included: revision of the inservice testing program documents for testing the valves; revision of the design basis document (DBD) for the residual heat removal system; reinforcement of the expectations with engineering staff on the use of DBDs and inservice testing background documents; and development of a project plan to update the inservice test background document.

The inspectors concluded that this finding is greater than minor because it was associated with the design control, equipment performance and maintenance and testing procedure quality attributes of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding is a design or qualification deficiency confirmed to not result in a loss of function per NRC Generic Letter 91-18. Therefore, the inspectors determined that this finding is a licensee performance deficiency of very low risk significance.

Inspection Report# : [2006002\(pdf\)](#)



Significance: Mar 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Address Effects of Elevated Temperatures on Control Room Instruments

The inspectors identified a non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) when the licensee failed to consider the effects of elevated control room temperatures on instrument inaccuracies following a design basis loss-of-coolant accident, which could potentially affect mitigation of the event. During the Problem Identification and Resolution Inspection documented in NRC Inspection Report 2005012, the inspectors identified an unresolved item (URI) related to the effects of elevated control room temperatures on instrument accuracies and accident mitigation during a design basis loss of coolant accident. Subsequent review and root cause evaluation determined that the licensee had failed to consider the effects of elevated control room temperatures on instrument inaccuracies for a calculation associated with the reconstitution project.

The licensee entered the issue in its corrective action system and performed a root cause analysis. Corrective actions to prevent recurrence included strengthening review requirements for the 30 percent, 60 percent and Owner Acceptance Review of vendor-supplied calculations for the calculation reconstitution project.

The inspectors concluded that the finding was greater than minor, as the finding represented a programmatic deficiency associated with the calculation reconstitution project that, if left uncorrected, would become a more significant concern due to calculation errors. The design deficiency did not result in a loss of function per Generic Letter 91-18 as sufficient emergency diesel generators remained available through administrative controls to provide electrical power for operators to promptly restart the control room ventilation system, hence the finding screened as very low safety significance (Green).

Inspection Report# : [2006002\(pdf\)](#)



Significance: Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Safety Evaluations on Safety-Related Motors

A finding of very low safety significance was identified by the inspectors associated with the replacement of the 1P-10A residual heat removal pump (RHR) motor. A Non-Cited Violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," was identified for the failure to perform an equivalency evaluation for exceptions taken to motor specifications in the refurbishment of safety-related equipment. Specifically, the licensee failed to perform a technical evaluation for exceptions taken by the vendor to the licensee's motor specification for the 1P-10A RHR pump motor. Once identified, the licensee initiated a corrective action program document (CAP) to perform an engineering evaluation before placing 1P-10A in service. The licensee also initiated an extent of condition review to ensure that other equipment was not subject to the same issues.

The inspectors determined that the finding was greater than minor because it: (1) involved the design control attribute of the Mitigating Systems Cornerstone; and (2) affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using Inspection Manual Chapter 0609, Appendix G, Phase 1 Screening, and determined that Checklist 4, "PWR Refueling Operation: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," applied, specifically Section I.C, "Core Heat Removal Guidelines - Equipment." However, because the 'A' RHR loop was not in operation and the 'B' train RHR loop was operable and in operation with support systems available, the inspectors determined that Section I.C was not affected. Additionally, the finding did not meet the Checklist 4 criteria for Phase 2 or Phase 3 quantitative analysis because the finding did not: increase the likelihood of a loss of reactor coolant system (RCS) inventory, including a loss of RCS level instrumentation; degrade the licensee's ability to terminate a leak path or add RCS inventory when needed; or degrade the licensee's ability to recover decay heat removal once it was lost. The inspectors also determined that the finding was of very low safety significance because no event occurred that could be characterized as a loss of control as listed in Table 1 of Inspection Manual Chapter 0609, Appendix G. Therefore, the finding was considered to be of very low safety significance.

Inspection Report# : [2005013\(pdf\)](#)

G**Significance:** Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Design Verification Testing of SI 850 Valves

The inspectors identified a finding involving a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," having very low safety significance for failure to complete testing, to demonstrate that the containment sump isolation valves (SI-850s) would remain open during post loss of coolant accident containment recirculation. This finding was entered into the licensee's corrective action program.

This finding was more than minor significance, because it affected the design control; and the equipment performance attributes of the Mitigating Systems Cornerstone; and affected the equipment reliability objective for this cornerstone. Equipment reliability was affected because, as these valves begin to drift shut, the post loss of coolant accident recirculation flow would be affected and require operator actions to compensate for valve drift to ensure adequate long term core cooling. The inspectors answered "yes" to the question in the Mitigating Systems Cornerstone worksheet, which asked if the finding was a design or qualification deficiency, confirmed to not result in loss of function per Generic Letter 91-18. Therefore, the inspectors determined that this finding was a licensee performance deficiency of very low risk significance.

Inspection Report# : [2005013\(pdf\)](#)**G****Significance:** Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Corrective Actions for Potential Boric Acid Corrosion of SI-850 Valves

The inspectors identified a finding involving a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action" having very low safety significance for failure to implement prompt corrective actions and inspect carbon steel hydraulic operating cylinder components on the 1(2) SI-850(A)(B) valve actuators after becoming aware of the nonconforming and potentially degraded conditions involving boric acid deposits and associated corrosion. The licensee implemented actions to clean up boric acid deposits and entered this finding into the corrective action program.

This finding was more than minor significance because absent NRC intervention, this issue could have become a more significant safety concern. Specifically, the licensee would have allowed an acidic environment (boric acid deposits) or aqueous environment (submerged fasteners) for these carbon steel components to continue for an indefinite period of time which could have resulted in corrosion induced failures of the SI-850 valve actuators and it affected the Mitigating Systems Cornerstone objective of equipment reliability. The inspectors answered "yes" to the question in the Mitigating Systems Cornerstone worksheet which asked if the finding was a design or qualification deficiency confirmed to not result in loss of function per Generic Letter 91-18. Therefore, the inspectors determined that this finding was a licensee performance deficiency of very low risk significance. The cause of the finding was related to the cross-cutting element of problem identification and resolution.

Inspection Report# : [2005013\(pdf\)](#)**G****Significance:** Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Incorrect Performance of Static Lift Test of Valve 2SI-850B

The inspectors identified a finding involving a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control" having very low safety significance for failure to correctly perform a static lift test of the 2SI-850B valve. This test was designed to record the hydraulic actuator pressure necessary to overcome valve dead weight and packing friction. This finding was entered into the licensee's corrective action program.

This finding was more than minor significance because it affected the equipment performance attribute of the Mitigating Systems Cornerstone and affected the equipment reliability objective for this cornerstone. Equipment reliability was affected because, the incorrectly performed as-found static lift test of 2SI-850B, did not provide the information needed to demonstrate the functional capability of this degraded valve. Although no definitive test data existed, the licensee staff believed that this degraded valve would have been functional with the oil leak (400 milliliters lost per closing stroke) because it stroked only 0.5 seconds slow for its open acceptance time during the quarterly stroke test and enough oil existed in the hydraulic reservoir to allow at least 10 open/close cycles. Because the licensee did not consider the valve nonfunctional for past periods of operation with this hydraulic leak, the inspectors answered "yes" to the question in the Mitigating Systems Cornerstone worksheet which asked if the finding was a design or qualification deficiency confirmed to not result in loss of function per Generic Letter 91-18. Therefore, the inspectors determined that this finding was a licensee performance deficiency of very low risk significance.

Inspection Report# : [2005013\(pdf\)](#)**Significance: SL-IV** Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Multiple Examples of the Failure to Notify the NRC Within 8 Hours as Required by 10 CFR 50.72

A finding of very low safety significance (with three examples) was identified by the inspectors for failure to notify the NRC within 8 hours in accordance with 10 CFR 50.72(b)(3)(ii)(B), following the identification that the nuclear power plant was in an unanalyzed condition that significantly degraded plant safety. Each occurrence was reported by the licensee following repeated questioning by the inspectors which occurred in April, September and November 2005. Following the November occurrence, the inspectors reviewed the licensee's previous causal evaluations and corrective actions. The inspectors noted that while the licensee had appropriately evaluated and initiated corrective actions for the technical issues in April and September 2005, the licensee had not appropriately evaluated or developed any corrective actions to address the failure to

adequately report these issues to the NRC in a timely manner. Therefore, the inspectors also determined that a primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to appropriately evaluate and take adequate corrective actions for the reportability aspect of these issues.

Because this issue affects the NRC's ability to perform its regulatory function, it was evaluated using the traditional enforcement process. The inspectors determined that this violation is of very low safety significance and because the licensee entered the issue into their corrective action program (CAP068938), this violation is being treated as an NCV consistent with Section VI.A.1 of the NRC Enforcement Policy. The licensee has taken actions to perform a causal evaluation and address the knowledge, and procedural aspects of this finding.

Inspection Report# : [2005013\(pdf\)](#)



Significance: Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Promptly Correct Potential Crimping Vulnerability of AFW Recirculation Line

A Non-Cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," having very low safety significance was identified by the inspector. Specifically, the licensee failed to promptly correct a condition adverse to quality, the potential for the auxiliary feedwater (AFW) recirculation line to crimp during a design basis earthquake (DBE) or design basis tornado (DBT) event. The licensee missed prior opportunities to correct the adverse condition: 1) as a result of the two Red findings related to the AFW System, the licensee reviewed the AFW system for the effects of high energy line break, DBE, and DBT events and identified crimping of the non-safety related portion of the common AFW recirculation line as a potential common mode failure; and 2) an external self-assessment in mid-2003 also concluded that crimping of the AFW recirculation line was credible and a potential common mode failure.

The licensee corrected this adverse condition by: 1) installing a pretested replacement for AFW pump recirculation line relief valve AF-4035 that was manufactured to meet ASME Code Section VIII requirements; and 2) having commitments to periodically replace AFW recirculation line relief valve AF-4035 with a pretested valve. These actions provided reasonable assurance that AF-4035 would provide the required flowpath to protect the AFW pumps if the AFW recirculation line crimped during a DBE or DBT event. The licensee planned to supplement CAP066199 to address the inadequate corrective actions.

The finding was more than minor because it affected the Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of systems that mitigate transients and the reactor accidents, and if left uncorrected, the finding could become a more significant safety concern. Specifically, if left uncorrected the AFW recirculation line relief valve could have deteriorated over time, failed to open as designed, and not provided the required recirculation line flowpath to protect the AFW pumps if the recirculation line crimped during a DBE or DBT event. The finding was of very low safety significance because testing of the original AFW recirculation line relief valve demonstrated that the relief valve would have opened as designed and would have provided the required AFW recirculation flowpath if the AFW recirculation line crimped during a DBE or DBT event. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to take adequate corrective actions.

Inspection Report# : [2005013\(pdf\)](#)

Significance: SL-IV Dec 16, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a 10 CFR 50.59 Evaluation for Compensatory Actions Associated with Letdown Line Automatic Isolation

The inspectors identified a Severity Level IV Non-Cited Violation of 10 CFR 50.59(d)(1) for the licensee's failure to perform a safety evaluation for compensatory actions taken for an activity associated with a degraded plant condition. Specifically, the licensee "screened out" an activity which replaced an automatic action for Chemical and Volume Control System (CVCS) letdown isolation on low pressurizer level with a manual action to isolate letdown on low pressurizer level, while replacing the Unit 2 pressurizer low level bistables with Unit 2 online at power. At the end of the inspection period, the licensee planned to perform a safety evaluation in accordance with 10 CFR Part 50.59 for the compensatory actions taken for the activity associated with the degraded plant condition.

Because the issue affected the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. The finding was determined to be more than minor because the inspectors, at the time of the inspection, could not reasonably determine that the UFSAR change, which adversely affected equipment important to safety, would not have ultimately required NRC approval. The inspectors evaluated the finding using IMC 0609, Appendix A, Phase 1 screening for the mitigating systems cornerstone and determined that the finding was of very low safety significance because the finding was not a design or qualification deficiency that was confirmed to result in a loss of operability or functionality per "Part 9900, Technical Guidance, Operability Determination Process for Operability and Functional Assessment."

Inspection Report# : [2005018\(pdf\)](#)



Significance: Dec 16, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Apply Adequate Design Controls During Replacement of Service Water (SW) Valves SW-360 and SW-322

A self-revealed finding of very low safety significance was identified by the inspectors associated with a violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control." During replacement of the Service Water outlet valves for the Component Cooling Water (CCW) heat exchangers, the licensee failed to evaluate design differences between the original valves and the replacement valves. These differences led to the eventual failure of the stems in both valves.

The issue was more than minor because it affected the mitigating system cornerstone attribute of "Design Control." The finding screened as having very low significance (Green) using IMC 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for the At-Power Situations," because the inspectors answered "no" to all five questions under the Mitigating Systems Cornerstone column of the Phase 1 worksheet. While the design deficiency led to failure of the valves, the failures occurred during a plant shutdown; therefore, the valves would not have been required to function as designed.

Inspection Report# : [2005018\(pdf\)](#)



Significance: Oct 06, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective Action Violation for Failure to Enter a Potential Condition Adverse to Quality into the Corrective Action Program

The team identified a Green Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for failure to enter into the corrective action program vendor information with the potential to degrade safety-related equipment. Specifically, in June 2005, no corrective action program document was written after the licensee was notified by the reactor head vendor about potential problems resulting from the method of storage in the containment. The licensee subsequently entered the issue into its corrective action program. As part of the corrective actions, the licensee counseled plant personnel in the reactor head replacement project about the need to enter such issues into the corrective action program.

This finding was more than minor because a more significant safety concern could occur if similar vendor issues were not entered into the corrective action program. The finding was of very low safety significance because the vendor subsequently determined that the head storage had been acceptable, no safety function was lost, no Technical Specification train or maintenance rule safety function was lost, and there were no external event concerns. The inspectors also determined that a primary cause of this finding was related to the cross-cutting aspect of problem identification and resolution in the area of identification, because the licensee failed to promptly identify a condition adverse to quality.

Inspection Report# : [2005012\(pdf\)](#)



Significance: Oct 06, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Design Control Violation for Failure to Incorporate Diesel Information into Procedures

The team identified a Green Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure, from around 1994 to the date of the inspection, to translate emergency diesel generator licensing and design bases into emergency and abnormal operating procedures. One emergency operating procedure and one abnormal operating procedure on each unit did not contain the diesel generator ratings and directed operators to place loads on the diesel generators that could exceed the licensing basis load limit. The licensee subsequently entered the issue into its corrective action program. As part of the corrective actions, the licensee revised the procedures to incorporate the appropriate information.

This finding was more than minor because it involved the design control attribute of the Mitigating Systems cornerstone and affected the cornerstone objective. Exceeding the licensing basis limit for diesel generator loading could affect the capability of the diesel generator to respond to a design basis accident, concurrent with a loss of offsite power and a single failure. The finding was of very low safety significance because this was a design deficiency with no loss of safety function

Inspection Report# : [2005012\(pdf\)](#)



Significance: Oct 06, 2005

Identified By: NRC

Item Type: FIN Finding

Inadequate Extent-of-Condition Evaluation for an Inadequate Abnormal Operating Procedure

The team identified a Green finding for the failure, in around July 2005, to perform an adequate extent-of-condition review following problems with auxiliary feedwater local control stations. After the apparent cause evaluation determined ineffective procedure validation had occurred, the extent-of-condition review did not check other procedures for similar problems. The licensee subsequently entered the issue into its corrective action program. As part of the corrective actions, the licensee was reviewing other procedures for similar problems.

This finding was more than minor because if left uncorrected, it could eventually result in failing to promptly identify conditions adverse to quality. The finding was of very low safety significance because no safety function was lost, no technical specification train or maintenance rule safety function was lost, and there were no external event concerns. The inspectors also determined that a primary cause of this finding was related to the cross-cutting aspect of problem identification and resolution in the area of evaluation, because the licensee failed to adequately evaluate a condition adverse to quality.

Inspection Report# : [2005012\(pdf\)](#)



Significance: Sep 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective Action Violation for Untimely Repair of Emergency Diesel Generator Cooling System Endbells With Microbiologically-Induced Corrosion

The inspectors identified a Green finding with an associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to take adequate corrective action for microbiologically-induced corrosion (MIC) of the endbells of the service water cooling system of the G-01 emergency diesel generator (EDG). Specifically, significant wastage caused by MIC, on the EDG endbells was identified in 2001 and work orders were written to replace the endbells. However, as of March 20, 2005, the endbells were not replaced which resulted in a self-revealed through-wall leak from MIC on an endbell, requiring the diesel to be removed from service to effect repairs. The licensee took immediate corrective actions to replace the endbell, followed by replacement of other susceptible EDG endbells. In addition, the licensee proposed changes to the predictive maintenance program to better identify potential sources of MIC corrosion in service water system components.

The issue was more than minor because the finding was associated with the equipment performance attribute of the Mitigating System cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. In addition, if left uncorrected, the finding could have become a more significant safety concern. The finding was determined to be of very low safety significance because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the Technical Specification allowed outage time, and no risk due to external events. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to take adequate corrective actions.

Inspection Report# : [2005010\(pdf\)](#)



Significance: Sep 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Technical Specification Violation for Inoperable Emergency Diesel Generator Because of Mispositioned Room Exhaust Fan Breaker

The inspectors identified a Green finding with an associated Non-Cited Violation of Technical Specification 3.8.1.E for the self-revealed problem on August 7, 2005, when one of the required room exhaust fans for the G-01 EDG failed to start due to a mispositioned breaker. The licensee returned the breaker to the proper position and investigated the cause of the mispositioning. The licensee planned and had taken additional corrective actions to provide clarification for aborting a procedure or scheduled activity and for ensuring equipment was appropriately returned to service.

The finding was more than minor, in that, it was associated with the configuration control attribute of the Mitigating System cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low safety significance because it did not involve a design deficiency, there was no actual loss of safety function, no single train loss of safety function for greater than the Technical Specification (TS)-allowed outage time, and no risk due to external events. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of human performance, because the licensee failed to ensure that the appropriate conditions were established after completion and cancellation of maintenance activities and before re-aligning G-01 to the safeguards bus.

Inspection Report# : [2005010\(pdf\)](#)



Significance: Sep 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Technical Specification Violation for Lack of a Procedure for Tripping Failed Loss-of-Voltage Relays

The inspectors identified a Green finding with an associated Non-Cited Violation of Technical Specification 5.4.1 for the failure to have a procedure to trip a loss-of-voltage time delay relay, a specific and foreseen potential malfunction, after the time delay function of the channel had failed. Specifically, on August 17, 2005, relay 1-62-3/A-06, associated with one channel of the 4160-Volt loss-of-voltage time delay function of the loss of offsite power EDG start and load sequence instrumentation, failed during calibration and testing. The licensee was not able to place the channel in trip in one hour (as required by TSs) due to not having an established procedure for performing this activity. The licensee took immediate corrective actions to correct the condition by replacing the time delay relay. In addition, at the end of the inspection period, the licensee planned additional evaluations and corrective actions to ensure the capability of performing the Technical Specification Action Condition within the required time frame.

The finding was more than minor, in that, it was associated with the procedure quality attribute of the Mitigating System cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low risk significance because it did not involve a design deficiency, there was no actual loss of safety function, no single train loss of safety function for greater than the TS-allowed outage time, and no risk due to external events.

Inspection Report# : [2005010\(pdf\)](#)



Significance: Aug 19, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedure for Starting Motor-Driven AFW Pumps for Certain Control Room Evacuations

A Green finding associated with a Non-Cited Violation of Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed on July 19, 2005, for the failure to have an appropriate procedure to assure proper operation of the motor-driven auxiliary feedwater (AFW) minimum recirculation valves when operating the AFW system from outside the control room using local panels N-01 and N-02. As a result, if operators had performed AOP-10, "Control Room Inaccessibility," Revision 3, during an event, minimum recirculation valves AF-4007 and AF-4014 would not have opened when the AFW pumps were locally started with the discharge valves closed. This could have

caused pump damage within one to two minutes.

The issue was more than minor because the finding was associated with the configuration control attribute of the Mitigating Systems cornerstone and adversely impacted the cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix A, which indicated that a Phase 2 evaluation was necessary. However, because procedure AOP-10 was used when the control room was evacuated with no Appendix R fire and no other accident conditions, a Phase 3 evaluation was performed. The issue was characterized as Green based on the low initiating event frequency (evacuation of the control room for reasons other than an Appendix R fire) coupled with the accident mitigation available from the turbine-driven AFW pumps and feed and bleed capability. The licensee took prompt corrective action to revise procedure AOP-10.
Inspection Report# : [2005011\(pdf\)](#)

Significance: SL-IV Aug 19, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

No 50.59 Safety Evaluation for a 2002 Modification to AFW

The inspectors identified a Severity Level IV, Non-Cited Violation of 10 CFR 50.59(d)(1) for the licensee's failure in September 2002 to perform a safety evaluation of the removal of the internals of the auxiliary feedwater (AFW) common recirculation line check valve, AF-117. Specifically, the licensee 'screened out' adverse changes made concerning the function and operation of all four AFW pumps. In this case, an automatic passive design feature of the AFW recirculation line piping was being made unavailable and the function was being changed to operation of an untested, nonsafety-related, active component--the AFW common recirculation line relief valve AF-4035--and it was being supplemented through the use of manual operator actions. This change warranted a 10 CFR 50.59 safety evaluation to determine if the changes met the criteria requiring a licensee amendment.

Because the issue potentially affected the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. This finding was determined to be more than minor because the inspectors could not reasonably determine that the original change would have ultimately required NRC approval. The inspectors completed a Significance Determination Review using IMC 0609, Appendix A "Significance Determination of Reactor Inspection Findings for At Power Situations." Using the Phase 1 Screening worksheet the finding was determined to be of very low safety significance (Green) since the finding did not represent an actual loss of safety function for greater than the Technical Specification allowed outage time. Comparing this item to the examples in NUREG 1600, Supplement I, this finding is similar to Item D.5, "Violations of 10 CFR 50.59 that do not involve circumstances in which a change that required prior Commission approval would not be found acceptable had the approval been sought." As a result, the issue was considered to be of very low safety significance and was dispositioned as a Severity Level IV, Non-Cited Violation (NCV).

Inspection Report# : [2005011\(pdf\)](#)

R

Significance: Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

Apparent violation of 10 CFR Part 50, Appendix B, Criterion III, for the failure to establish the appropriate design control measures for the installation of orifices to the AFW recirculation lines

An apparent violation was identified, in part, through a self-revealing event when decreased auxiliary feedwater pump recirculation flow was noted during post-maintenance testing. Subsequent licensee and NRC review of the event determined that the licensee had installed incorrectly designed orifices in each of the pump recirculation lines. The orifices, due to small clearances, were susceptible to plugging. The primary causes of this finding were inadequacies in the licensee's design process and the licensee's implementation of the process, including the identification of system design requirements and the development of supporting safety evaluations.

The issue has been preliminarily determined to have high safety significance (Red). Following installation of the inadequately designed orifices, the entire auxiliary feedwater system was susceptible to a common mode failure during operations using service water. Failure of auxiliary feedwater during several initiating events could lead to core damage. The installation of the incorrectly designed orifices in the recirculation lines is an apparent violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

On December 11, 2003, the final significance determination letter was issued for this finding. It was determined that this is a RED finding for Unit 2 and a YELLOW finding for Unit 1. For tracking purposes, identical findings were opened for Unit 1 (designated as YELLOW) and Unit 2 (designated as RED).

Inspection Report# : [2002015\(pdf\)](#)

Significance: N/A Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

The failure to identify the root cause and implement corrective actions for the AFW/IA issue, a significant condition adverse to quality, so as to prevent recurrence.

A violation was identified for the licensee's failure to implement adequate corrective actions to effectively address a previous Red finding and preclude recurrence (Inspection Report 50-266/01-17; 50-301/01-17). Specifically, the licensee failed to identify potential common mode failures that existed involving power supplies to the recirculation line air-operated valve and other system components. In addition, the licensee's corrective actions for the potential common mode failure associated with a loss of instrument air did not preclude repetition. Specifically, the licensee's corrective actions, to upgrade the safety function of the air-operated recirculation valve, failed to ensure that successful operation of the recirculation line air-operated valve was dependent only on safety-related support systems. Following the corrective actions, successful operation of

the valve was still dependent upon nonsafety-related power to an interposing relay. Additionally, the corrective actions failed to discover a single failure mechanism involving a system orifice modification.

The issue was more than minor because the failure to implement appropriate corrective actions resulted in the auxiliary feedwater system continuing to rely on nonsafety-related support systems and to be susceptible to a single event causing a total system failure. The failure of nonsafety-related support systems and single event failures are an expected condition during several design basis accidents and should not cause a safety system to fail. The failure of the licensee to implement adequate corrective actions is a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action."

This violation is associated with a previously identified RED finding (IR 50-266;50-30/01-17).

Inspection Report# : [2002015\(pdf\)](#)

R

Significance: Feb 28, 2002

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002.

Inspection Report 50-266/02-15; 50-301/02-15, issued April 2, 2003, documented the NRC decision that this finding is not an Old Design Issue.

Inspection Report# : [2001017\(pdf\)](#)

Inspection Report# : [2003003\(pdf\)](#)

Barrier Integrity

Significance: SL-IV Dec 16, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Updated Final Safety Analysis Report Change to Replace ASME Class II, Seismic Class I, Piping with a Freeze Seal

The inspectors identified a Severity Level IV Non-Cited Violation associated with the failure to perform an adequate safety evaluation review as required by 10 CFR 50.59 for changes made to the facility as described in the UFSAR. In their safety evaluation, EVAL 2004-003, the licensee failed to provide a basis for the determination that on-line repairs to the excess letdown line with a freeze seal in place as a boundary for Reactor Coolant System (RCS) effluent from the Reactor Coolant Pumps (RCPs) was acceptable without a license amendment. Specifically, for this freeze seal evolution, the licensee would have replaced the American Society of Mechanical Engineers (ASME) Class II, Seismic Class I piping in the excess letdown line with a freeze plug while the plant was still on-line. Within the 10 CFR 50.59 evaluation, the licensee failed to provide a basis for why this freeze seal evolution did not present more than a minimal increase in the likelihood of occurrence of a malfunction of a Structure, System and Component (SSC) important to safety.

Because the issue affected the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. The finding was determined to be more than minor because the inspectors could not reasonably determine that the UFSAR change, which adversely affected equipment important to safety, would not have ultimately required NRC approval. The finding was determined to be of very low safety significance (Green), because the inspectors answered "no" to all three questions under the Containment Barriers Cornerstone column of the Phase 1 worksheet.

Inspection Report# : [2005018\(pdf\)](#)

Emergency Preparedness

W

Significance: Dec 16, 2005

Identified By: NRC

Item Type: VIO Violation

Observation and Review of Emergency Preparedness Drill, August 1, 2002

On December 16, 2005, the staff issued a WHITE finding and NOV of 10 CFR 50.47. The WHITE finding was associated with the failure to self-identify the untimely declaration of an Alert classification during an August 2002 Emergency Preparedness drill. The inspection finding was assessed using the Significance Determination Process and was preliminarily characterized as WHITE.

In a January, 2006 telephone call, the licensee was informed that the NRC would be taking a one-time deviation from the Action Matrix process. Normally, a supplemental 95001 inspection would be performed after a WHITE finding is determined; however, in this case, the effectiveness of the licensee's corrective actions to improve the capability to identify, track, and resolve critique items associated with EP drills and exercises was demonstrated with no findings or PIs greater than GREEN identified by NRC since August 2003. Additionally, both individuals involved with providing inaccurate information had their employments terminated on December 20, 2002. The WHITE finding will not be considered indicative of current performance in the EP cornerstone, and will not be considered in formulating a regulatory course of action should a new WHITE finding occur in the EP cornerstone.

Inspection Report# : [2002010\(pdf\)](#)

Inspection Report# : [2005017\(pdf\)](#)

Significance: SL-III Nov 30, 2005

Identified By: NRC

Item Type: VIO Violation

Failure to Provide Complete and Accurate Information from August 1, 2002 EP drill

On December 16, 2005, the staff proposed a severity level III NOV of 10 CFR 50.9, and \$60,000 civil penalty. The violation involved inaccurate information provided to the NRC associated with a critique of the August 2002 EP drill.

In summary, on or about November 20, 2002, the licensee provided the Commission with information that was not complete and accurate in all material respects, concerning the results of post-drill critiques of an August 1, 2002 EP drill. Specifically, during an NRC inspection, the former Point Beach EP Manager provided NRC inspectors with a "Drill and Exercise Performance - Performance Indicator Evaluation Form", which indicated that the licensee had self-identified an untimely declaration of an Alert classification during the post-drill critique. In fact, the licensee had not identified the drill weakness during the August 2002 critique. The original document was date August 2, 2002, and stated that the licensee had declared the Alert classification 5 minutes after plant parameters reached the Emergency Action Level, and within the 15 minute limit. However, on or about November 15, 2002, the former EP Manager and former EP Coordinator altered the document to indicate that the Alert classification was made after the 15 minute limit had been exceeded. The EP Manager and former EP Coordinator also backdated the document to August 23, 2002, in order to give the appearance that the licensee, and not the NRC, had identified the drill weakness. Information on the "Drill and Exercise Performance - Performance Indicator Evaluation Form" is material to the NRC as it is used to determine whether weaknesses during an EP drill are identified, evaluated and corrected. The actions of the former EP Manager and former EP Coordinator, both licensee officials, resulted in the submission of materially inaccurate information to both NMC and the NRC, a violation of 10 CFR 50.9. The violation is categorized in accordance with the NRC Enforcement Policy at Severity Level III (EA-05-191). Additionally, the actions of the former EP Manager and former EP Coordinator were deliberate and violated 10 CFR 50.5, "Deliberate Misconduct."

Inspection Report# : [2005017\(pdf\)](#)

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

Significance: SL-IV Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a 50.59 Evaluation of Increased Design Loads on the Auxiliary Building

The inspectors identified a Severity Level IV, Non-Cited Violation of 10 CFR 50.59(d)(1) for failure to perform a written evaluation of increased

design loads on the crane and the auxiliary building. The licensee performed a calculation to demonstrate the capability of the auxiliary building to hold a single-failure-proof crane with a 125-ton load during a seismic event. After the inspectors identified that no written evaluation has been performed, the licensee completed the evaluation and concluded that a license amendment was not required as a result of increased design loads.

Because violations of 10 CFR 50.59 affect the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. In accordance with the NRC Enforcement Policy, this finding is determined to be more than minor because there was a reasonable likelihood that the change requiring the 10 CFR 50.59 evaluation would require NRC review and approval prior to implementation. This finding has been reviewed by NRC management and is determined to be a Green finding, of very low safety significance.

Inspection Report# : [2006004\(pdf\)](#)

Last modified : August 25, 2006

Point Beach 2

3Q/2006 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2006

Identified By: NRC

Item Type: FIN Finding

Failure to Take Adequate Actions for Potential High Wind Conditions

A finding of very low safety significance was identified by the inspectors for failure to control loose materials in the protected area in the vicinity of the main and auxiliary transformers. No violation of NRC requirements occurred. Failure to take action to remove loose material in the protected area has problem identification and resolution cross-cutting aspects involving failure of assigned personnel to identify and correct potential tornado missiles that could be generated from such loose material in the vicinity of the main and auxiliary transformers. Once identified, the licensee initiated a corrective action program document to develop a surveillance procedure to remove loose materials before summer months when potential adverse weather was possible, performed walkdowns of the affected areas, and removed material which could become a potential hazard in high velocity winds and tornadoes.

The inspectors determined that the finding was more than minor because, if left uncorrected, the loose items adjacent to the main and auxiliary transformers would become a more significant safety concern. The issue is of very low safety significance because the finding did not contribute to the likelihood of a primary or secondary system loss of coolant accident initiator; the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available; and the finding did not increase the likelihood of a fire or internal or external flooding. The issue is not considered a violation of regulatory requirements because the finding did not affect safety-related structures, systems, or components.

Inspection Report# : [2006004\(pdf\)](#)

Mitigating Systems

Significance:  Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Potential Common Mode Failure Mechanism Due to Overdutied Circuit Breakers

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance involving electrical system short circuit studies. Specifically, the inspectors identified that the licensee failed to identify or analyze the potential consequences of faults on non-seismically protected circuits, or the potential for degradation of redundant trains due to a fault on a non-safety circuit that is routed in raceways associated with both redundant trains.

The inspectors determined that the finding was more than minor because the failure to identify and analyze unacceptable consequences of overdutied circuit breakers could impact their safety function. In the evaluation, The inspectors determined that the finding screened as Green because, as an immediate corrective action for this issue, the licensee performed an operability evaluation that determined that despite the failure to properly analyze the consequences of overdutied circuit breakers, there was sufficient cable impedance to assure that loss of redundant buses due to postulated faults would not occur.

Inspection Report# : [2006006\(pdf\)](#)

Significance:  Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Conservative EDG Loading Calculation

The inspectors identified a finding of very low safety significance associated with a violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control." Specifically, Emergency Diesel Generator (EDG) Room exhaust fans, EDG diesel air start compressors, and additional loading caused by the EDG operating at frequencies above 60 Hertz (Hz) were not considered in the licensee's EDG loading calculation. The licensee determined that this issue was not an operability concern, because these additional loads did not cause the EDG to be overloaded during design basis accident conditions.

The issue was more than minor because the failure to identify loads that would be supplied during an accident condition could result in eventual overloading of the EDG. The finding screened as having very low significance (Green) because the inspectors answered "no" to all five questions under the Mitigating Systems Cornerstone column of the Phase 1 worksheet. After performing a calculation to support operability, it was determined that there were conservatisms and other unnecessary loads in the EDG loading calculation that served to counteract the non-conservatisms that were identified by the inspection team resulting in the EDG not exceeding any vendor load limitations

Inspection Report# : [2006006\(pdf\)](#)

Significance:  Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Lack of a 4 Hour SBO Coping Duration Heat-Up Calculation for the AFP Rooms

The inspectors identified a finding of very low safety significance associated with a violation of 10 CFR 50.63, "Loss of all Alternating Current Power." Specifically, the licensee never performed a calculation that evaluated the effects of loss of ventilation on the Auxiliary Feedwater Pump (AFP) room during a Station Blackout (SBO). The AFP rooms, which each house a turbine driven AFP (TDAFP), had not been evaluated for the heatup that would occur during the SBO 4 hour coping duration. In response to the inspector's concerns, the licensee performed informal calculations to provide reasonable assurance that the heatup in the room during an SBO would not adversely affect the equipment.

The issue was more than minor because the licensee had not maintained a heatup calculation for the TDAFP room that assessed the effects of heatup on safe shutdown equipment as required for station blackout. The finding screened as having very low significance (Green) because the inspectors answered "no" to all five questions under the Mitigating Systems Cornerstone column of the Phase 1 worksheet.

Inspection Report# : [2006006\(pdf\)](#)

Significance:  Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Condensate Storage Tank Vortexing Calculation Did Not Bound Station Blackout Scenario

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) involving the useable volume in the condensate storage tank (CST). Specifically, the inspectors identified that the licensee's calculation to show that there would not be vortexing in the CST was not bounding for the station blackout scenario, which was the basis for the CST volume stated in the Technical Specifications. The licensee's corrective actions included verifying the CST contained a sufficient volume to prevent vortexing in support of a station blackout scenario, and initiated actions to perform a formal calculation and to established an administrative limit to increase the available margin from the Technical Specification limit.

The finding was more than minor because the failure to adequately evaluate the CST vortex limit could have led to an insufficient useable volume in the CST preventing the auxiliary feedwater system from performing its function during a station blackout scenario and could have affected the mitigating systems cornerstone objective of design control. The finding was of very low safety significance based on the results of the licensee's analysis and screened as Green using the SDP Phase 1 screening worksheet.

Inspection Report# : [2006006\(pdf\)](#)

Significance:  Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Unverified Fouling Factor Assumption for Containment Fan Coolers

The team identified a Green non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion XI, Test Control, relating to the safety-related Containment Fan Coolers (CFC) for not assuring that the fouling factor inside the tubes was not maintained above the minimum specified analytical limit to prevent boiling of Service Water inside the coolers' tubes during accident conditions. Specifically, the licensee visually inspected the coolers and did not establish a specific criterion for accepting a fouling factor not lower than the established minimum of 0.0003 ft²-hr-°F/Btu to prevent boiling inside the tubes.

This finding was greater than minor because the current method of testing the fan coolers did not demonstrate that the existing fouling was such to prevent boiling. The finding screened as Green because, as an immediate corrective action, the licensee demonstrated through an evaluation that if boiling occurred, it will occur first in the upper tubes before the condition of the water in the lower tubes will cause boiling. This would result in excess service water flow to the lower tubes such that the fan coolers could still perform their safety function.

Inspection Report# : [2006006\(pdf\)](#)

Significance:  Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Reactor Water Storage Tank/Spent Fuel Pool Pipe Support Calculation Deficiencies

The team identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance involving a modification that upgraded the Reactor Water Storage Tank/Spent Fuel Pool recirculation loop small bore piping and the Units 1 and 2 Reactor Water Storage Tank cross connect branches from the loop to Seismic Class I piping. Specifically, the inspection team found numerous non-conservative technical errors and calculation omissions in seismic design basis analysis calculations that supported this modification. This issue was entered into the licensee's corrective action system.

The issue was more than minor because the presence of these non-conservative calculational deficiencies resulted in seismic design basis analysis calculations to be re-performed to assure that the pipe supports would function as required during the design basis seismic event. The finding screened as having very low significance (Green) because the inspectors answered "no" to all five questions under the Mitigating Systems Cornerstone column of the Phase 1 worksheet. Specifically, after re-performing the calculations for the supports that were called into question by the inspection team, the licensee was able to show that enough margin was still available to support the loads that would be seen during the design basis seismic event.

Inspection Report# : [2006006\(pdf\)](#)

Significance:  Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a 50.59 Evaluation for Compensatory Measures Described in Operability Recommendation

The inspectors identified a Severity Level IV, Non-Cited Violation of 10 CFR 50.59(d)(1) for the licensee's failure to perform an evaluation for compensatory actions taken to maintain the closed function of the emergency core cooling system (ECCS) containment sump isolation valves. Specifically, the licensee established compensatory actions in the event remote operation from the control room of the containment sump recirculation isolation valves (1SI-850A, 1SI-850B, 2SI-850A and 2SI-850B) was ineffective during plant minimum or degraded voltage conditions. The licensee had not completed a causal evaluation by the end of the inspection period; however, remedial corrective actions to address certain aspects of this issue had been implemented.

Because violations of 10 CFR 50.59 affect the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. In accordance with the NRC Enforcement Policy, this finding is determined to be more than minor because there was a reasonable likelihood that the change requiring the 10 CFR 50.59 evaluation would require NRC review and approval prior to implementation. This finding has been reviewed by NRC management and is determined to be a Green finding, of very low safety significance.

Inspection Report# : [2006004\(pdf\)](#)

G**Significance:** Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain and Implement Adequate Procedures for Control Room Ventilation Testing

The inspectors identified a Non-Cited Violation of Technical Specification 5.4.1 for the failure to have adequately established, implemented, and maintained procedures for Technical Specification Surveillance testing of the control room emergency filtration system. The inspectors observed the performance of the 18-month surveillance for testing of the control room emergency filtration system, per procedure HPIP-115.4. The inspectors noted that the visual inspection, charcoal sampling, collection of the fan flow data, and the compilation/evaluation of fan flow measurement data were conducted but not as specified in the procedure.

The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of problem identification and resolution. The last performance of this test, conducted 18 months prior, revealed numerous performance deficiencies, which included an inadequate procedure and the failure to properly implement portions of the procedure. However, the corrective actions taken for the deficiencies identified during the last performance failed to correct the procedure maintenance and implementation issues associated with procedure HPIP-11.54. The licensee had not completed a causal evaluation by the end of the inspection period; however, the licensee had implemented remedial corrective actions to address certain aspects of this issue.

The inspectors concluded that the finding is greater than minor because it is associated with the procedure quality attribute for maintenance and testing (pre-event) procedures of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated this finding using the significance determination process and determined that this finding is a licensee performance deficiency of very low risk significance (Green).

Inspection Report# : [2006004\(pdf\)](#)G**Significance:** Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Update and Maintain the Final Safety Analysis Report as Required by 10 CFR 50.71(e)

The inspectors identified a Severity Level IV, Non-Cited Violation of 10 CFR Part 50.71(e) for the self-revealed failure to update the Final Safety Analysis Report (FSAR) to assure that the information in the report was the latest information developed and contained all changes necessary to reflect information and analyses submitted to the NRC. This finding was self-revealed following the inspectors' identification of numerous FSAR inaccuracies concerning licensee responses to generic docketed correspondence to the commission. This was further corroborated by a follow-up licensee self-assessment and streaming analysis conducted by the licensee. As a result, the licensee initiated a root cause evaluation which also identified the failure to update the FSAR in response to licensee credited actions, new NRC regulations, programmatic licensee commitments, and certain license amendment safety evaluation reports.

The inspectors determined that a primary cause of the finding was related to the cross-cutting element of human performance due to the failure to have processes and procedures to maintain the current licensing basis and a lack of knowledge by plant staff of regulatory requirements. The licensee has taken immediate remedial corrective actions to address several issues, including the development of a site policy and procedures which defined the current licensing basis. In addition, the licensee has planned comprehensive corrective actions, including a detailed project scope to update the FSAR.

Because violations of 10 CFR 50.71(e) affect the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. In accordance with the NRC Enforcement Policy, this finding is determined to be more than minor because a failure to update the FSAR could have had a material impact on safety or licensed activities. This finding has been reviewed by NRC management and is determined to be a Green finding, of very low safety significance.

Inspection Report# : [2006004\(pdf\)](#)G**Significance:** Mar 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Maintain Leak Detection Capability

The inspectors identified a non-cited violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) for the failure to maintain the design basis and configuration control for the detection of recirculation system leakage from the containment sump isolation valve cylinders (valves SI-850A and SI-850B for Units 1 and 2). This issue was initially identified by the inspectors during walkdowns and reviews of the containment sump recirculation piping in November/December 2005; however, at that time, the issue was not recognized by the licensee as part of the design basis of the facility. During a review of a request for additional information from the Office of Nuclear Reactor Regulation regarding a November 8, 2005, 10 CFR 50.72 report, the licensee subsequently determined that, in fact, leakage detection of the containment sump isolation valve cylinders through the pipe sleeve into the auxiliary building was part of the system's design and licensing basis.

At the end of the inspection, the licensee had not completed a causal evaluation; however, several interim actions were in place to address the operable, but non-conforming condition. The licensee had established a corrective action to determine how to resolve this non-conforming issue.

The inspectors concluded that this finding is greater than minor because it was associated with the design control and the equipment performance attributes of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding is a design or qualification deficiency confirmed to not result in loss of function per NRC Generic Letter 91-18. Therefore, the inspectors determined that this finding is a licensee performance deficiency of very low risk significance (Green).

Inspection Report# : [2006002\(pdf\)](#)

Significance:  Mar 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Maintain Safety Function for SI-850 Valves in the Closed Direction

The inspectors identified a non-cited violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) for the failure to ensure the safety function of the containment sump isolation valves was maintained and tested in accordance with the design and licensing basis. This issue was initially identified by the inspectors during walkdowns and reviews of the containment sump recirculation piping in November/December 2005; however, at that time, the issue was not recognized by the licensee as part of the design and licensing basis of the facility. The licensee subsequently determined that the design and licensing basis for the closed safety function of these valves was not properly implemented in accordance with the facility's license and required codes or standards.

The licensee performed a causal evaluation and developed several interim and long-term corrective actions. Those corrective actions included: revision of the inservice testing program documents for testing the valves; revision of the design basis document (DBD) for the residual heat removal system; reinforcement of the expectations with engineering staff on the use of DBDs and inservice testing background documents; and development of a project plan to update the inservice test background document.

The inspectors concluded that this finding is greater than minor because it was associated with the design control, equipment performance and maintenance and testing procedure quality attributes of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding is a design or qualification deficiency confirmed to not result in a loss of function per NRC Generic Letter 91-18. Therefore, the inspectors determined that this finding is a licensee performance deficiency of very low risk significance.

Inspection Report# : [2006002\(pdf\)](#)

Significance:  Mar 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Address Effects of Elevated Temperatures on Control Room Instruments

The inspectors identified a non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) when the licensee failed to consider the effects of elevated control room temperatures on instrument inaccuracies following a design basis loss-of-coolant accident, which could potentially affect mitigation of the event. During the Problem Identification and Resolution Inspection documented in NRC Inspection Report 2005012, the inspectors identified an unresolved item (URI) related to the effects of elevated control room temperatures on instrument accuracies and accident mitigation during a design basis loss of coolant accident. Subsequent review and root cause evaluation determined that the licensee had failed to consider the effects of elevated control room temperatures on instrument inaccuracies for a calculation associated with the reconstitution project.

The licensee entered the issue in its corrective action system and performed a root cause analysis. Corrective actions to prevent recurrence included strengthening review requirements for the 30 percent, 60 percent and Owner Acceptance Review of vendor-supplied calculations for the calculation reconstitution project.

The inspectors concluded that the finding was greater than minor, as the finding represented a programmatic deficiency associated with the calculation reconstitution project that, if left uncorrected, would become a more significant concern due to calculation errors. The design deficiency did not result in a loss of function per Generic Letter 91-18 as sufficient emergency diesel generators remained available through administrative controls to provide electrical power for operators to promptly restart the control room ventilation system, hence the finding screened as very low safety significance (Green).
Inspection Report# : [2006002\(pdf\)](#)

Significance:  Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Safety Evaluations on Safety-Related Motors

A finding of very low safety significance was identified by the inspectors associated with the replacement of the 1P-10A residual heat removal pump (RHR) motor. A Non-Cited Violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," was identified for the failure to perform an equivalency evaluation for exceptions taken to motor specifications in the refurbishment of safety-related equipment. Specifically, the licensee failed to perform a technical evaluation for exceptions taken by the vendor to the licensee's motor specification for the 1P-10A RHR pump motor. Once identified, the licensee initiated a corrective action program document (CAP) to perform an engineering evaluation before placing 1P-10A in service. The licensee also initiated an extent of condition review to ensure that other equipment was not subject to the same issues.

The inspectors determined that the finding was greater than minor because it: (1) involved the design control attribute of the Mitigating Systems Cornerstone; and (2) affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using Inspection Manual Chapter 0609, Appendix G, Phase 1 Screening, and determined that Checklist 4, "PWR Refueling Operation: RCS level > 23' OR PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer," applied, specifically Section I.C, "Core Heat Removal Guidelines - Equipment." However, because the 'A' RHR loop was not in operation and the 'B' train RHR loop was operable and in operation with support systems available, the inspectors determined that Section I.C was not affected. Additionally, the finding did not meet the Checklist 4 criteria for Phase 2 or Phase 3 quantitative analysis because the finding did not: increase the likelihood of a loss of reactor coolant system (RCS) inventory, including a loss of RCS level instrumentation; degrade the licensee's ability to terminate a leak path or add RCS inventory when needed; or degrade the licensee's ability to recover decay heat removal once it was lost. The inspectors also determined that the finding was of very low safety significance because no event occurred that could be characterized as a loss of control as listed in Table 1 of Inspection Manual Chapter 0609, Appendix G. Therefore, the finding was considered to be of very low safety significance.

Inspection Report# : [2005013\(pdf\)](#)

Significance:  Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Design Verification Testing of SI 850 Valves

The inspectors identified a finding involving a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," having very low safety significance for failure to complete testing, to demonstrate that the containment sump

isolation valves (SI-850s) would remain open during post loss of coolant accident containment recirculation. This finding was entered into the licensee's corrective action program.

This finding was more than minor significance, because it affected the design control; and the equipment performance attributes of the Mitigating Systems Cornerstone; and affected the equipment reliability objective for this cornerstone. Equipment reliability was affected because, as these valves begin to drift shut, the post loss of coolant accident recirculation flow would be affected and require operator actions to compensate for valve drift to ensure adequate long term core cooling. The inspectors answered "yes" to the question in the Mitigating Systems Cornerstone worksheet, which asked if the finding was a design or qualification deficiency, confirmed to not result in loss of function per Generic Letter 91-18. Therefore, the inspectors determined that this finding was a licensee performance deficiency of very low risk significance. Inspection Report# : [2005013\(pdf\)](#)

Significance:  Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Corrective Actions for Potential Boric Acid Corrosion of SI-850 Valves

The inspectors identified a finding involving a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action" having very low safety significance for failure to implement prompt corrective actions and inspect carbon steel hydraulic operating cylinder components on the 1(2) SI-850(A)(B) valve actuators after becoming aware of the nonconforming and potentially degraded conditions involving boric acid deposits and associated corrosion. The licensee implemented actions to clean up boric acid deposits and entered this finding into the corrective action program.

This finding was more than minor significance because absent NRC intervention, this issue could have become a more significant safety concern. Specifically, the licensee would have allowed an acidic environment (boric acid deposits) or aqueous environment (submerged fasteners) for these carbon steel components to continue for an indefinite period of time which could have resulted in corrosion induced failures of the SI-850 valve actuators and it affected the Mitigating Systems Cornerstone objective of equipment reliability. The inspectors answered "yes" to the question in the Mitigating Systems Cornerstone worksheet which asked if the finding was a design or qualification deficiency confirmed to not result in loss of function per Generic Letter 91-18. Therefore, the inspectors determined that this finding was a licensee performance deficiency of very low risk significance. The cause of the finding was related to the cross-cutting element of problem identification and resolution.

Inspection Report# : [2005013\(pdf\)](#)

Significance:  Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Incorrect Performance of Static Lift Test of Valve 2SI-850B

The inspectors identified a finding involving a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control" having very low safety significance for failure to correctly perform a static lift test of the 2SI-850B valve. This test was designed to record the hydraulic actuator pressure necessary to overcome valve dead weight and packing friction. This finding was entered into the licensee's corrective action program.

This finding was more than minor significance because it affected the equipment performance attribute of the Mitigating Systems Cornerstone and affected the equipment reliability objective for this cornerstone. Equipment reliability was affected because, the incorrectly performed as-found static lift test of 2SI-850B, did not provide the information needed to demonstrate the functional capability of this degraded valve. Although no definitive test data existed, the licensee staff believed that this degraded valve would have been functional with the oil leak (400 milliliters lost per closing stroke) because it stroked only 0.5 seconds slow for its open acceptance time during the quarterly stroke test and enough oil existed in the hydraulic reservoir to allow at least 10 open/close cycles. Because the licensee did not consider the valve nonfunctional for past periods of operation with this hydraulic leak, the inspectors answered "yes" to the question in the Mitigating Systems Cornerstone worksheet which asked if the finding was a design or qualification deficiency confirmed to not result in loss of function per Generic Letter 91-18. Therefore, the inspectors determined that this finding was a licensee performance deficiency of very low risk significance.

Inspection Report# : [2005013\(pdf\)](#)

Significance: SL-IV Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Multiple Examples of the Failure to Notify the NRC Within 8 Hours as Required by 10 CFR 50.72

A finding of very low safety significance (with three examples) was identified by the inspectors for failure to notify the NRC within 8 hours in accordance with 10 CFR 50.72(b)(3)(ii)(B), following the identification that the nuclear power plant was in an unanalyzed condition that significantly degraded plant safety. Each occurrence was reported by the licensee following repeated questioning by the inspectors which occurred in April, September and November 2005. Following the November occurrence, the inspectors reviewed the licensee's previous causal evaluations and corrective actions. The inspectors noted that while the licensee had appropriately evaluated and initiated corrective actions for the technical issues in April and September 2005, the licensee had not appropriately evaluated or developed any corrective actions to address the failure to adequately report these issues to the NRC in a timely manner. Therefore, the inspectors also determined that a primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to appropriately evaluate and take adequate corrective actions for the reportability aspect of these issues.

Because this issue affects the NRC's ability to perform its regulatory function, it was evaluated using the traditional enforcement process. The inspectors determined that this violation is of very low safety significance and because the licensee entered the issue into their corrective action program (CAP068938), this violation is being treated as an NCV consistent with Section VI.A.1 of the NRC Enforcement Policy. The licensee has taken actions to perform a causal evaluation and address the knowledge, and procedural aspects of this finding.

Inspection Report# : [2005013\(pdf\)](#)

Significance:  Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Promptly Correct Potential Crimping Vulnerability of AFW Recirculation Line

A Non-Cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," having very low safety significance was identified by the inspector. Specifically, the licensee failed to promptly correct a condition adverse to quality, the potential for the auxiliary feedwater (AFW) recirculation line to crimp during a design basis earthquake (DBE) or design basis tornado (DBT) event. The licensee missed prior opportunities to correct the adverse condition: 1) as a result of the two Red findings related to the AFW System, the licensee reviewed the AFW system for the effects of high energy line break, DBE, and DBT events and identified crimping of the non-safety related portion of the common AFW recirculation line as a potential common mode failure; and 2) an external self-assessment in mid-2003 also concluded that crimping of the AFW recirculation line was credible and a potential common mode failure.

The licensee corrected this adverse condition by: 1) installing a pretested replacement for AFW pump recirculation line relief valve AF-4035 that was manufactured to meet ASME Code Section VIII requirements; and 2) having commitments to periodically replace AFW recirculation line relief valve AF-4035 with a pretested valve. These actions provided reasonable assurance that AF-4035 would provide the required flowpath to protect the AFW pumps if the AFW recirculation line crimped during a DBE or DBT event. The licensee planned to supplement CAP066199 to address the inadequate corrective actions.

The finding was more than minor because it affected the Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of systems that mitigate transients and the reactor accidents, and if left uncorrected, the finding could become a more significant safety concern. Specifically, if left uncorrected the AFW recirculation line relief valve could have deteriorated over time, failed to open as designed, and not provided the required recirculation line flowpath to protect the AFW pumps if the recirculation line crimped during a DBE or DBT event. The finding was of very low safety significance because testing of the original AFW recirculation line relief valve demonstrated that the relief valve would have opened as designed and would have provided the required AFW recirculation flowpath if the AFW recirculation line crimped during a DBE or DBT event. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of problem identification and resolution, because the licensee failed to take adequate corrective actions.

Inspection Report# : [2005013\(pdf\)](#)

Significance: SL-IV Dec 16, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a 10 CFR 50.59 Evaluation for Compensatory Actions Associated with Letdown Line Automatic Isolation

The inspectors identified a Severity Level IV Non-Cited Violation of 10 CFR 50.59(d)(1) for the licensee's failure to perform a safety evaluation for compensatory actions taken for an activity associated with a degraded plant condition. Specifically, the licensee "screened out" an activity which replaced an automatic action for Chemical and Volume Control System (CVCS) letdown isolation on low pressurizer level with a manual action to isolate letdown on low pressurizer level, while replacing the Unit 2 pressurizer low level bistables with Unit 2 online at power. At the end of the inspection period, the licensee planned to perform a safety evaluation in accordance with 10 CFR Part 50.59 for the compensatory actions taken for the activity associated with the degraded plant condition.

Because the issue affected the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. The finding was determined to be more than minor because the inspectors, at the time of the inspection, could not reasonably determine that the UFSAR change, which adversely affected equipment important to safety, would not have ultimately required NRC approval. The inspectors evaluated the finding using IMC 0609, Appendix A, Phase 1 screening for the mitigating systems cornerstone and determined that the finding was of very low safety significance because the finding was not a design or qualification deficiency that was confirmed to result in a loss of operability or functionality per "Part 9900, Technical Guidance, Operability Determination Process for Operability and Functional Assessment."

Inspection Report# : [2005018\(pdf\)](#)

Significance:  Dec 16, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Apply Adequate Design Controls During Replacement of Service Water (SW) Valves SW-360 and SW-322

A self-revealed finding of very low safety significance was identified by the inspectors associated with a violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control." During replacement of the Service Water outlet valves for the Component Cooling Water (CCW) heat exchangers, the licensee failed to evaluate design differences between the original valves and the replacement valves. These differences led to the eventual failure of the stems in both valves.

The issue was more than minor because it affected the mitigating system cornerstone attribute of "Design Control." The finding screened as having very low significance (Green) using IMC 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for the At-Power Situations," because the inspectors answered "no" to all five questions under the Mitigating Systems Cornerstone column of the Phase 1 worksheet. While the design deficiency led to failure of the valves, the failures occurred during a plant shutdown; therefore, the valves would not have been required to function as designed.

Inspection Report# : [2005018\(pdf\)](#)

Significance:  Oct 06, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Corrective Action Violation for Failure to Enter a Potential Condition Adverse to Quality into the Corrective Action Program

The team identified a Green Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for failure to enter into the corrective action program vendor information with the potential to degrade safety-related equipment. Specifically, in June 2005, no corrective action program document was written after the licensee was notified by the reactor head vendor about potential problems resulting from the method of storage in the containment. The licensee subsequently entered the issue into its corrective action program. As part of the corrective actions, the licensee counseled plant personnel in the reactor head replacement project about the need to enter such issues into the corrective action program.

This finding was more than minor because a more significant safety concern could occur if similar vendor issues were not entered into the corrective action program. The finding was of very low safety significance because the vendor subsequently determined that the head storage had been acceptable, no safety function was lost, no Technical Specification

train or maintenance rule safety function was lost, and there were no external event concerns. The inspectors also determined that a primary cause of this finding was related to the cross-cutting aspect of problem identification and resolution in the area of identification, because the licensee failed to promptly identify a condition adverse to quality. Inspection Report# : [2005012\(pdf\)](#)

Significance:  Oct 06, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Design Control Violation for Failure to Incorporate Diesel Information into Procedures

The team identified a Green Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure, from around 1994 to the date of the inspection, to translate emergency diesel generator licensing and design bases into emergency and abnormal operating procedures. One emergency operating procedure and one abnormal operating procedure on each unit did not contain the diesel generator ratings and directed operators to place loads on the diesel generators that could exceed the licensing basis load limit. The licensee subsequently entered the issue into its corrective action program. As part of the corrective actions, the licensee revised the procedures to incorporate the appropriate information.

This finding was more than minor because it involved the design control attribute of the Mitigating Systems cornerstone and affected the cornerstone objective. Exceeding the licensing basis limit for diesel generator loading could affect the capability of the diesel generator to respond to a design basis accident, concurrent with a loss of offsite power and a single failure. The finding was of very low safety significance because this was a design deficiency with no loss of safety function. Inspection Report# : [2005012\(pdf\)](#)

Significance:  Oct 06, 2005

Identified By: NRC

Item Type: FIN Finding

Inadequate Extent-of-Condition Evaluation for an Inadequate Abnormal Operating Procedure

The team identified a Green finding for the failure, in around July 2005, to perform an adequate extent-of-condition review following problems with auxiliary feedwater local control stations. After the apparent cause evaluation determined ineffective procedure validation had occurred, the extent-of-condition review did not check other procedures for similar problems. The licensee subsequently entered the issue into its corrective action program. As part of the corrective actions, the licensee was reviewing other procedures for similar problems.

This finding was more than minor because if left uncorrected, it could eventually result in failing to promptly identify conditions adverse to quality. The finding was of very low safety significance because no safety function was lost, no technical specification train or maintenance rule safety function was lost, and there were no external event concerns. The inspectors also determined that a primary cause of this finding was related to the cross-cutting aspect of problem identification and resolution in the area of evaluation, because the licensee failed to adequately evaluate a condition adverse to quality.

Inspection Report# : [2005012\(pdf\)](#)

Significance:  Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

Apparent violation of 10 CFR Part 50, Appendix B, Criterion III, for the failure to establish the appropriate design control measures for the installation of orifices to the AFW recirculation lines

An apparent violation was identified, in part, through a self-revealing event when decreased auxiliary feedwater pump recirculation flow was noted during post-maintenance testing. Subsequent licensee and NRC review of the event determined that the licensee had installed incorrectly designed orifices in each of the pump recirculation lines. The orifices, due to small clearances, were susceptible to plugging. The primary causes of this finding were inadequacies in the licensee's design process and the licensee's implementation of the process, including the identification of system design requirements and the development of supporting safety evaluations.

The issue has been preliminarily determined to have high safety significance (Red). Following installation of the

inadequately designed orifices, the entire auxiliary feedwater system was susceptible to a common mode failure during operations using service water. Failure of auxiliary feedwater during several initiating events could lead to core damage. The installation of the incorrectly designed orifices in the recirculation lines is an apparent violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

On December 11, 2003, the final significance determination letter was issued for this finding. It was determined that this is a RED finding for Unit 2 and a YELLOW finding for Unit 1. For tracking purposes, identical findings were opened for Unit 1 (designated as YELLOW) and Unit 2 (designated as RED).

Inspection Report# : [2002015\(pdf\)](#)

Significance: N/A Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

The failure to identify the root cause and implement corrective actions for the AFW/IA issue, a significant condition adverse to quality, so as to prevent recurrence.

A violation was identified for the licensee's failure to implement adequate corrective actions to effectively address a previous Red finding and preclude recurrence (Inspection Report 50-266/01-17; 50-301/01-17). Specifically, the licensee failed to identify potential common mode failures that existed involving power supplies to the recirculation line air-operated valve and other system components. In addition, the licensee's corrective actions for the potential common mode failure associated with a loss of instrument air did not preclude repetition. Specifically, the licensee's corrective actions, to upgrade the safety function of the air-operated recirculation valve, failed to ensure that successful operation of the recirculation line air-operated valve was dependent only on safety-related support systems. Following the corrective actions, successful operation of the valve was still dependent upon nonsafety-related power to an interposing relay. Additionally, the corrective actions failed to discover a single failure mechanism involving a system orifice modification.

The issue was more than minor because the failure to implement appropriate corrective actions resulted in the auxiliary feedwater system continuing to rely on nonsafety-related support systems and to be susceptible to a single event causing a total system failure. The failure of nonsafety-related support systems and single event failures are an expected condition during several design basis accidents and should not cause a safety system to fail. The failure of the licensee to implement adequate corrective actions is a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action."

This violation is associated with a previously identified RED finding (IR 50-266;50-30/01-17).

Inspection Report# : [2002015\(pdf\)](#)

Significance: R Feb 28, 2002

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002.

Inspection Report 50-266/02-15; 50-301/02-15, issued April 2, 2003, documented the NRC decision that this finding is not an Old Design Issue.

Inspection Report# : [2001017\(pdf\)](#)

Inspection Report# : [2003003\(pdf\)](#)

Barrier Integrity

Significance: SL-IV Dec 16, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Updated Final Safety Analysis Report Change to Replace ASME Class II, Seismic Class I, Piping with a Freeze Seal

The inspectors identified a Severity Level IV Non-Cited Violation associated with the failure to perform an adequate safety evaluation review as required by 10 CFR 50.59 for changes made to the facility as described in the UFSAR. In their safety evaluation, EVAL 2004-003, the licensee failed to provide a basis for the determination that on-line repairs to the excess letdown line with a freeze seal in place as a boundary for Reactor Coolant System (RCS) effluent from the Reactor Coolant Pumps (RCPs) was acceptable without a license amendment. Specifically, for this freeze seal evolution, the licensee would have replaced the American Society of Mechanical Engineers (ASME) Class II, Seismic Class I piping in the excess letdown line with a freeze plug while the plant was still on-line. Within the 10 CFR 50.59 evaluation, the licensee failed to provide a basis for why this freeze seal evolution did not present more than a minimal increase in the likelihood of occurrence of a malfunction of a Structure, System and Component (SSC) important to safety.

Because the issue affected the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. The finding was determined to be more than minor because the inspectors could not reasonably determine that the UFSAR change, which adversely affected equipment important to safety, would not have ultimately required NRC approval. The finding was determined to be of very low safety significance (Green), because the inspectors answered "no" to all three questions under the Containment Barriers Cornerstone column of the Phase 1 worksheet.

Inspection Report# : [2005018\(pdf\)](#)

Emergency Preparedness

Significance: **W** Dec 16, 2005

Identified By: NRC

Item Type: VIO Violation

Observation and Review of Emergency Preparedness Drill, August 1, 2002

On December 16, 2005, the staff issued a WHITE finding and NOV of 10 CFR 50.47. The WHITE finding was associated with the failure to self-identify the untimely declaration of an Alert classification during an August 2002 Emergency Preparedness drill. The inspection finding was assessed using the Significance Determination Process and was preliminarily characterized as WHITE.

In a January, 2006 telephone call, the licensee was informed that the NRC would be taking a one-time deviation from the Action Matrix process. Normally, a supplemental 95001 inspection would be performed after a WHITE finding is determined; however, in this case, the effectiveness of the licensee's corrective actions to improve the capability to identify, track, and resolve critique items associated with EP drills and exercises was demonstrated with no findings or PIs greater than GREEN identified by NRC since August 2003. Additionally, both individuals involved with providing inaccurate information had their employments terminated on December 20, 2002. The WHITE finding will not be considered indicative of current performance in the EP cornerstone, and will not be considered in formulating a regulatory course of action should a new WHITE finding occur in the EP cornerstone.

Inspection Report# : [2002010\(pdf\)](#)

Inspection Report# : [2005017\(pdf\)](#)

Significance: SL-III Nov 30, 2005

Identified By: NRC

Item Type: VIO Violation

Failure to Provide Complete and Accurate Information from August 1, 2002 EP drill

On December 16, 2005, the staff proposed a severity level III NOV of 10 CFR 50.9, and \$60,000 civil penalty. The violation involved inaccurate information provided to the NRC associated with a critique of the August 2002 EP drill.

In summary, on or about November 20, 2002, the licensee provided the Commission with information that was not complete and accurate in all material respects, concerning the results of post-drill critiques of an August 1, 2002 EP drill. Specifically, during an NRC inspection, the former Point Beach EP Manager provided NRC inspectors with a "Drill and Exercise Performance - Performance Indicator Evaluation Form", which indicated that the licensee had self-identified an untimely declaration of an Alert classification during the post-drill critique. In fact, the licensee had not identified the drill weakness during the August 2002 critique. The original document was date August 2, 2002, and stated that the licensee had declared the Alert classification 5 minutes after plant parameters reached the Emergency Action Level, and within the 15 minute limit. However, on or about November 15, 2002, the former EP Manager and former EP Coordinator altered the document to indicate that the Alert classification was made after the 15 minute limit had been exceeded. The EP Manager and former EP Coordinator also backdated the document to August 23, 2002, in order to give the appearance that the licensee, and not the NRC, had identified the drill weakness. Information on the "Drill and Exercise Performance - Performance Indicator Evaluation Form" is material to the NRC as it is used to determine whether weaknesses during an EP drill are identified, evaluated and corrected. The actions of the former EP Manager and former EP Coordinator, both licensee officials, resulted in the submission of materially inaccurate information to both NMC and the NRC, a violation of 10 CFR 50.9. The violation is categorized in accordance with the NRC Enforcement Policy at Severity Level III (EA-05-191). Additionally, the actions of the former EP Manager and former EP Coordinator were deliberate and violated 10 CFR 50.5, "Deliberate Misconduct."

Inspection Report# : [2005017\(pdf\)](#)

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

Significance: SL-IV Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a 50.59 Evaluation of Increased Design Loads on the Auxiliary Building

The inspectors identified a Severity Level IV, Non-Cited Violation of 10 CFR 50.59(d)(1) for failure to perform a written evaluation of increased design loads on the crane and the auxiliary building. The licensee performed a calculation to demonstrate the capability of the auxiliary building to hold a single-failure-proof crane with a 125-ton load during a seismic event. After the inspectors identified that no written evaluation has been performed, the licensee completed the evaluation and concluded that a license amendment was not required as a result of increased design loads.

Because violations of 10 CFR 50.59 affect the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. In accordance with the NRC Enforcement Policy, this finding is determined to be more than minor because there was a reasonable likelihood that the change requiring the 10 CFR 50.59 evaluation would

require NRC review and approval prior to implementation. This finding has been reviewed by NRC management and is determined to be a Green finding, of very low safety significance.

Inspection Report# : [2006004\(pdf\)](#)

Last modified : December 21, 2006

Point Beach 2

4Q/2006 Plant Inspection Findings

Initiating Events

Significance: SL-III Dec 31, 2006

Identified By: NRC

Item Type: VIO Violation

Failure to Update FSAR With Reactor Head Drop Analysis and Obtain NRC Approval

The inspectors identified an apparent violation for the failure of the licensee in 1983 to incorporate the results of an 1982 analysis of a postulated drop of the reactor vessel head on the vessel into the Final Safety Analysis Report (FSAR). The apparent violation is subject to the NRC's traditional enforcement process because it had the potential for impacting the NRC's ability to perform its regulatory function. After the problem was identified in early 2005, the licensee submitted a revised head drop analysis that the NRC reviewed and subsequently approved; evaluated the Unit 2 replacement vessel head against that analysis; updated its FSAR; and conducted a review to identify other instances where the FSAR may not have been updated.

This finding is considered greater than minor because the failure to update the FSAR as required by 10 CFR 50.71(e) resulted in the licensee not obtaining the necessary review and approval of the 1982 analysis, and in the removal and reinstallation of the original reactor heads from 1983 to 2004 without administrative controls similar to those established for head moves in 2005 and after. Also, the finding is associated with the design control attribute of the Initiating Events Cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown. Because findings involving 10 CFR 50.71(e) potentially affect the NRC's ability to perform its regulatory function, and reactor vessel head drop analysis issues are not suitable for Significance Determination Process analysis, this finding is being evaluated using the traditional enforcement process.

In a letter dated January 29, 2007, a Notice of Violation was issued for a Severity Level III violation of 10 CFR 50.71(e). There is no civil penalty.

Inspection Report# : [2006011](#) (*pdf*)

Significance:  Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Replacement Reactor Vessel Head Design Deficiencies

The inspectors identified a non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) when the licensee failed to assure from October 2002 to April 2005 that deviations in weight, a specific value used in analysis of the effects of a postulated accident, of the Unit 2 replacement reactor vessel head and head assembly upgrade package were controlled in accordance with the original design bases. One result of this failure was that the licensee's 10 CFR 50.59 evaluation completed in February 2005 for the replacement head was inadequate. The licensee entered the finding into its corrective action program, and revised head replacement project documents and the station design bases to account for the differences between the Unit 2 replacement vessel head and the original head. In addition, the licensee completed an adequate 10 CFR 50.59 evaluation. These actions were taken prior to the actual lift of the new head that occurred in June 2005.

The inspectors concluded that the finding is greater than minor because it was associated with the design control attribute of the Initiating Events Cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown. Consultation with the Region III Senior Reactor Analysts determined that reactor vessel head drop issues were not suitable for the Significance Determination Process analysis. Therefore, this finding has been reviewed by NRC management and is determined to be a Green finding, of very low significance. The inspectors also determined that a primary cause of this finding is related to the cross-cutting area of human performance.

Inspection Report# : [2006011](#) (*pdf*)

Significance:  Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Design Control for a Flooding Barrier During a Plant Modification

The inspectors identified a non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, "Design Control," having very low safety significance for the failure to maintain flooding barriers after drilling holes and installing conduit from the containment facade buildings to the auxiliary building during modification MR 04-013 "Charging Pump Variable Frequency Drive (VFD) Installation." As part of corrective actions, the licensee properly sealed the openings. The issue was entered into the corrective action program.

The finding is greater than minor because it was associated with the design control and flood hazard attributes of the Initiating Events cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. A flood in the auxiliary building could affect safety-related equipment and result in an upset of plant stability. Although the finding involved the degradation of a flooding barrier, the volume of any potential flooding was judged, based on the size of the hole, to be bounded by the existing internal flooding analysis for the auxiliary building, as well as the licensee's probabilistic risk assessment; hence, the finding screened as very low safety significance. This finding has a cross-cutting aspect in the area of human performance because resources were not provided to ensure accurate and up-to-date work packages for implementation of the modification.

Inspection Report# : [2006013](#) (*pdf*)

Significance:  Dec 31, 2006

Identified By: NRC

Item Type: FIN Finding

Inadequate Contractor Oversight Which Resulted in Damage to a Unit 2 Steam Generator Vent Line

A finding of very low safety significance was self-revealed on November 14, 2006, when unqualified contract crane technicians operated the Unit 2 polar crane and damaged the 'B' steam generator vent line with the main hook of the crane. The reactor was shutdown at the time of the event. As part of corrective actions, the licensee removed authorization for the technicians to operate the crane, ensured necessary procedural controls were implemented, and evaluated the damaged vent line. The issue was entered into the corrective action program. Subsequently, plant engineers concluded that the vent line remained operable, but degraded.

This finding is greater than minor because if left uncorrected it would become a more significant safety concern in that a significant upset of plant stability would have occurred had the crane hook damaged other, safety-related equipment. In addition, the finding is associated with the human performance attribute of the Initiating Events cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Because the transient initiator contributor was main steam vent piping damage, which did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available, the finding is considered to be of very low safety significance. The finding has a cross-cutting aspect in the area of human performance because the licensee's work practices failed to ensure adequate supervisory and management oversight of contractor work activities.

Inspection Report# : [2006013](#) (*pdf*)

Significance:  Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedural Controls for Manually Operated Breakers Located in Certain Control Panels

A finding and associated non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," having very low safety significance was self-revealed on October 16, 2006, during the out-of-service tagging of a manually operated breaker (MOB) in the Unit 2 control panel. The reactor was shutdown at the time of the event but at normal operating pressure and temperature. During the tagging, an adjacent breaker was inadvertently repositioned resulting in the opening of the pressurizer power-operated relief valve (PORV). About 63 gallons of reactor coolant were

released through the valve to the pressurizer relief tank before operators repositioned the breaker and the valve re-closed. The released was categorized as a Notification of Unusual Event. The mispositioning was caused by a lack of adequate procedural controls for working in the control panels and a lack of knowledge by personnel as to the minimal force required to open the MOBs. As part of corrective actions, the licensee replaced or protected the most risk significant MOBs, trained workers on the operating sensitivity of the breakers, and established controls governing work in the control panels around sensitive equipment. The issue was entered into the corrective action program and the licensee performed a root cause evaluation for this event.

This finding is greater than minor because if left uncorrected it would become a more significant safety concern in that the inadvertent re-positioning of other similar breakers in the main control room control panels would significantly upset plant stability. In addition, the finding is associated with the procedure quality and human performance attribute of the Initiating Events cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Because attributes such as core heat removal, inventory control, power availability, containment control, and reactivity guidelines were met, the finding screened as (Green) having very low safety significance. The finding has a cross-cutting aspect in the area of human performance because the licensee's control of work failed to incorporate into planned work activities job site conditions, including environmental conditions which may impact human performance, and the human-system interface, that is, the operator interface with the breakers in the close confines of the control panels.

Inspection Report# : [2006013](#) (pdf)

Significance:  Jun 30, 2006

Identified By: NRC

Item Type: FIN Finding

Failure to Take Adequate Actions for Potential High Wind Conditions

A finding of very low safety significance was identified by the inspectors for failure to control loose materials in the protected area in the vicinity of the main and auxiliary transformers. No violation of NRC requirements occurred. Failure to take action to remove loose material in the protected area has problem identification and resolution cross-cutting aspects involving failure of assigned personnel to identify and correct potential tornado missiles that could be generated from such loose material in the vicinity of the main and auxiliary transformers. Once identified, the licensee initiated a corrective action program document to develop a surveillance procedure to remove loose materials before summer months when potential adverse weather was possible, performed walkdowns of the affected areas, and removed material which could become a potential hazard in high velocity winds and tornadoes.

The inspectors determined that the finding was more than minor because, if left uncorrected, the loose items adjacent to the main and auxiliary transformers would become a more significant safety concern. The issue is of very low safety significance because the finding did not contribute to the likelihood of a primary or secondary system loss of coolant accident initiator; the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available; and the finding did not increase the likelihood of a fire or internal or external flooding. The issue is not considered a violation of regulatory requirements because the finding did not affect safety-related structures, systems, or components.

Inspection Report# : [2006004](#) (pdf)

Mitigating Systems

Significance:  Dec 15, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedure for Identifying Degraded Piping

The inspectors identified a finding of very low safety significance involving areas of service water piping where microbiologically induced corrosion was identified but the wall thicknesses of the pipe in those areas were not measured. An NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," was associated with this finding for failure to prescribe directions to ensure all areas of degradation identified were characterized. The licensee

performed radiographic examination of safety-related piping in the service water system to identify and determine the extent of degradation and to take appropriate corrective action to maintain operability. However, the radiographic technique used did not provide information on the most severe (deepest) degradation in the section of pipe examined. Without this information, the licensee's evaluation of the piping integrity, actions to perform inspections of additional pipe segments, and actions to perform more frequent inspection on the same section could be inappropriate. The licensee entered this finding into its corrective action program for evaluation.

This finding is greater than minor because it was associated with the procedure quality attribute of the Mitigating System cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the procedure did not require adequate characterization of the extent of microbiologically induced corrosion (MIC) in service water (SW) piping to ensure that MIC degradation would not result in failure of the SW piping pressure boundary. Because there were no active through-wall leaks in this system and no known degradation which exceeded the Code minimum wall thickness, the finding is of very low safety significance.

Inspection Report# : [2006015](#) (*pdf*)

Significance:  Dec 15, 2006

Identified By: NRC

Item Type: FIN Finding

Inadequate Extent-of-Condition Review

The inspectors identified a finding of very low safety significance with no associated violation for an inadequate extent-of-condition review for boric acid leakage found in the last quarter of 2005 on the safety injection-850 valves (containment recirculation sump isolation valves). During the current inspection, the inspectors identified boric acid leakage on other valves that the licensee had not evaluated. The licensee entered this finding into its corrective action program.

This finding is greater than minor because failing to evaluate boric acid leakage would lead to component failure and had the potential to become a more significant safety concern. Because no safety function was lost, no Technical Specification train or maintenance rule safety function was lost, and there was no external event concerns. The finding is of very low safety significance. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of PI&R within the component of the corrective action program and the aspect of thorough evaluation of problems.

Inspection Report# : [2006015](#) (*pdf*)

Significance:  Sep 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Emergency Core Cooling System Sump Flow Design Control Deficiencies

The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance when the licensee did not correctly interpret the results of calculations of the head available to drive flow across the emergency core cooling system (ECCS) sump screens and also did not identify and did not analyze for a postulated sump plugging condition as it affected net positive suction head (NPSH) for the residual heat removal (RHR) pumps. As a result, the licensee failed to maintain design margins for ECCS sump flow. The licensee completed a causal evaluation and developed corrective actions, including the implementation of compensatory measures to ensure sump outlet flow was limited to eliminate flashing and to ensure that adequate NSPH was available.

The inspectors concluded the finding is greater than minor because it was associated with the design control attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). This design control deficiency was confirmed not to result in loss of operability per "Part 9900, Technical Guidance, Operability Determination Process for Operability and Functional Assessment." Hence, the finding screened as of very low risk significance. The inspectors also determined that a primary cause of this finding is related to the cross-cutting area of human performance. The lack of engineering rigor associated with review of this calculation involved the cross-cutting component of resources in that personnel, procedures, and supervisory resources were not adequate to assure nuclear safety, and the cross-cutting aspect of maintaining long-term plant safety by maintenance of design margins specified in calculations. The licensee did not maintain adequate NPSH margin or preclude air intrusion, as the ECCS sump flow parameter (RHR pump flow during phase 2 recirculation following a postulated loss of coolant accident was not appropriately limited in the emergency

operating procedures.

Inspection Report# : [2006005](#) (*pdf*)

Significance:  Sep 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Containment Coatings Program Weaknesses

The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance when the licensee failed to assure that the limits of unqualified and degraded coatings within the containment sump zone of influence, as documented in the 1999 analyses of record, were correctly translated into specifications and plant procedures and that deviations since 1999 were appropriately controlled. Subsequently, the inspectors identified that the licensee had exceeded the design analysis limits associated with the quantities of degraded and unqualified coatings in containment. The licensee completed a causal evaluation and developed corrective actions, including the removal of degraded coatings and the revision of site procedures to include limits for degraded and unqualified coatings

The inspectors concluded the finding is greater than minor because it was associated with the design control attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). This design control deficiency was confirmed not to result in a loss of operability per "Part 9900, Technical Guidance, Operability Determination Process for Operability and Functional Assessment." Hence, the finding screened of as very low safety significance. The inspectors also determined that a primary cause of this finding is related to the cross-cutting area of human performance. The failure to appropriately maintain the amount of unqualified and degraded coatings in accordance with the analyses of record involved the cross-cutting component of resources for the failure to ensure that personnel, procedures, and supervisory resources were adequate to assure nuclear safety, and the cross-cutting aspect of maintaining long-term plant safety by maintenance of design margins specified in calculations supporting the design basis accidents.

Inspection Report# : [2006005](#) (*pdf*)

Significance:  Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Potential Common Mode Failure Mechanism Due to Overdutied Circuit Breakers

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance involving electrical system short circuit studies. Specifically, the inspectors identified that the licensee failed to identify or analyze the potential consequences of faults on non-seismically protected circuits, or the potential for degradation of redundant trains due to a fault on a non-safety circuit that is routed in raceways associated with both redundant trains.

The inspectors determined that the finding was more than minor because the failure to identify and analyze unacceptable consequences of overdutied circuit breakers could impact their safety function. In the evaluation, The inspectors determined that the finding screened as Green because, as an immediate corrective action for this issue, the licensee performed an operability evaluation that determined that despite the failure to properly analyze the consequences of overdutied circuit breakers, there was sufficient cable impedance to assure that loss of redundant buses due to postulated faults would not occur.

Inspection Report# : [2006006](#) (*pdf*)

Significance:  Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Conservative EDG Loading Calculation

The inspectors identified a finding of very low safety significance associated with a violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control." Specifically, Emergency Diesel Generator (EDG) Room exhaust fans, EDG diesel air start compressors, and additional loading caused by the EDG operating at frequencies above 60 Hertz (Hz) were not considered in the licensee's EDG loading calculation. The licensee determined that this issue was not an operability

concern, because these additional loads did not cause the EDG to be overloaded during design basis accident conditions.

The issue was more than minor because the failure to identify loads that would be supplied during an accident condition could result in eventual overloading of the EDG. The finding screened as having very low significance (Green) because the inspectors answered “no” to all five questions under the Mitigating Systems Cornerstone column of the Phase 1 worksheet. After performing a calculation to support operability, it was determined that there were conservatisms and other unnecessary loads in the EDG loading calculation that served to counteract the non-conservatism that were identified by the inspection team resulting in the EDG not exceeding any vendor load limitations

Inspection Report# : [2006006](#) (*pdf*)

Significance:  Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Lack of a 4 Hour SBO Coping Duration Heat-Up Calculation for the AFP Rooms

The inspectors identified a finding of very low safety significance associated with a violation of 10 CFR 50.63, “Loss of all Alternating Current Power.” Specifically, the licensee never performed a calculation that evaluated the effects of loss of ventilation on the Auxiliary Feedwater Pump (AFP) room during a Station Blackout (SBO). The AFP rooms, which each house a turbine driven AFP (TDAFP), had not been evaluated for the heatup that would occur during the SBO 4 hour coping duration. In response to the inspector’s concerns, the licensee performed informal calculations to provide reasonable assurance that the heatup in the room during an SBO would not adversely affect the equipment.

The issue was more than minor because the licensee had not maintained a heatup calculation for the TDAFP room that assessed the effects of heatup on safe shutdown equipment as required for station blackout. The finding screened as having very low significance (Green) because the inspectors answered “no” to all five questions under the Mitigating Systems Cornerstone column of the Phase 1 worksheet.

Inspection Report# : [2006006](#) (*pdf*)

Significance:  Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Condensate Storage Tank Vortexing Calculation Did Not Bound Station Blackout Scenario

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” having very low safety significance (Green) involving the useable volume in the condensate storage tank (CST). Specifically, the inspectors identified that the licensee’s calculation to show that there would not be vortexing in the CST was not bounding for the station blackout scenario, which was the basis for the CST volume stated in the Technical Specifications. The licensee’s corrective actions included verifying the CST contained a sufficient volume to prevent vortexing in support of a station blackout scenario, and initiated actions to perform a formal calculation and to established an administrative limit to increase the available margin from the Technical Specification limit.

The finding was more than minor because the failure to adequately evaluate the CST vortex limit could have led to an insufficient useable volume in the CST preventing the auxiliary feedwater system from performing its function during a station blackout scenario and could have affected the mitigating systems cornerstone objective of design control. The finding was of very low safety significance based on the results of the licensee’s analysis and screened as Green using the SDP Phase 1 screening worksheet.

Inspection Report# : [2006006](#) (*pdf*)

Significance:  Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Unverified Fouling Factor Assumption for Containment Fan Coolers

The team identified a Green non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion XI, Test Control, relating to the safety-related Containment Fan Coolers (CFC) for not assuring that the fouling factor inside the tubes was not maintained above the minimum specified analytical limit to prevent boiling of Service Water inside the coolers' tubes during accident conditions. Specifically, the licensee visually inspected the coolers and did not establish a specific criterion

for accepting a fouling factor not lower than the established minimum of 0.0003 ft²-hr-°F/Btu to prevent boiling inside the tubes.

This finding was greater than minor because the current method of testing the fan coolers did not demonstrate that the existing fouling was such to prevent boiling. The finding screened as Green because, as an immediate corrective action, the licensee demonstrated through an evaluation that if boiling occurred, it will occur first in the upper tubes before the condition of the water in the lower tubes will cause boiling. This would result in excess service water flow to the lower tubes such that the fan coolers could still perform their safety function.

Inspection Report# : [2006006](#) (*pdf*)

Significance:  Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Reactor Water Storage Tank/Spent Fuel Pool Pipe Support Calculation Deficiencies

The team identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance involving a modification that upgraded the Reactor Water Storage Tank/Spent Fuel Pool recirculation loop small bore piping and the Units 1 and 2 Reactor Water Storage Tank cross connect branches from the loop to Seismic Class I piping. Specifically, the inspection team found numerous non-conservative technical errors and calculation omissions in seismic design basis analysis calculations that supported this modification. This issue was entered into the licensee's corrective action system.

The issue was more than minor because the presence of these non-conservative calculational deficiencies resulted in seismic design basis analysis calculations to be re-performed to assure that the pipe supports would function as required during the design basis seismic event. The finding screened as having very low significance (Green) because the inspectors answered "no" to all five questions under the Mitigating Systems Cornerstone column of the Phase 1 worksheet.

Specifically, after re-performing the calculations for the supports that were called into question by the inspection team, the licensee was able to show that enough margin was still available to support the loads that would be seen during the design basis seismic event.

Inspection Report# : [2006006](#) (*pdf*)

Significance:  Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a 50.59 Evaluation for Compensatory Measures Described in Operability Recommendation

The inspectors identified a Severity Level IV, Non-Cited Violation of 10 CFR 50.59(d)(1) for the licensee's failure to perform an evaluation for compensatory actions taken to maintain the closed function of the emergency core cooling system (ECCS) containment sump isolation valves. Specifically, the licensee established compensatory actions in the event remote operation from the control room of the containment sump recirculation isolation valves (1SI-850A, 1SI-850B, 2SI-850A and 2SI-850B) was ineffective during plant minimum or degraded voltage conditions. The licensee had not completed a causal evaluation by the end of the inspection period; however, remedial corrective actions to address certain aspects of this issue had been implemented.

Because violations of 10 CFR 50.59 affect the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. In accordance with the NRC Enforcement Policy, this finding is determined to be more than minor because there was a reasonable likelihood that the change requiring the 10 CFR 50.59 evaluation would require NRC review and approval prior to implementation. This finding has been reviewed by NRC management and is determined to be a Green finding, of very low safety significance.

Inspection Report# : [2006004](#) (*pdf*)

Significance:  Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain and Implement Adequate Procedures for Control Room Ventilation Testing

The inspectors identified a Non-Cited Violation of Technical Specification 5.4.1 for the failure to have adequately

established, implemented, and maintained procedures for Technical Specification Surveillance testing of the control room emergency filtration system. The inspectors observed the performance of the 18-month surveillance for testing of the control room emergency filtration system, per procedure HPIP-115.4. The inspectors noted that the visual inspection, charcoal sampling, collection of the fan flow data, and the compilation/evaluation of fan flow measurement data were conducted but not as specified in the procedure.

The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of problem identification and resolution. The last performance of this test, conducted 18 months prior, revealed numerous performance deficiencies, which included an inadequate procedure and the failure to properly implement portions of the procedure. However, the corrective actions taken for the deficiencies identified during the last performance failed to correct the procedure maintenance and implementation issues associated with procedure HPIP-11.54. The licensee had not completed a causal evaluation by the end of the inspection period; however, the licensee had implemented remedial corrective actions to address certain aspects of this issue.

The inspectors concluded that the finding is greater than minor because it is associated with the procedure quality attribute for maintenance and testing (pre-event) procedures of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated this finding using the significance determination process and determined that this finding is a licensee performance deficiency of very low risk significance (Green).

Inspection Report# : [2006004](#) (pdf)

Significance:  Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Update and Maintain the Final Safety Analysis Report as Required by 10 CFR 50.71(e)

The inspectors identified a Severity Level IV, Non-Cited Violation of 10 CFR Part 50.71(e) for the self-revealed failure to update the Final Safety Analysis Report (FSAR) to assure that the information in the report was the latest information developed and contained all changes necessary to reflect information and analyses submitted to the NRC. This finding was self-revealed following the inspectors' identification of numerous FSAR inaccuracies concerning licensee responses to generic docketed correspondence to the commission. This was further corroborated by a follow-up licensee self-assessment and streaming analysis conducted by the licensee. As a result, the licensee initiated a root cause evaluation which also identified the failure to update the FSAR in response to licensee credited actions, new NRC regulations, programmatic licensee commitments, and certain license amendment safety evaluation reports.

The inspectors determined that a primary cause of the finding was related to the cross-cutting element of human performance due to the failure to have processes and procedures to maintain the current licensing basis and a lack of knowledge by plant staff of regulatory requirements. The licensee has taken immediate remedial corrective actions to address several issues, including the development of a site policy and procedures which defined the current licensing basis. In addition, the licensee has planned comprehensive corrective actions, including a detailed project scope to update the FSAR.

Because violations of 10 CFR 50.71(e) affect the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. In accordance with the NRC Enforcement Policy, this finding is determined to be more than minor because a failure to update the FSAR could have had a material impact on safety or licensed activities. This finding has been reviewed by NRC management and is determined to be a Green finding, of very low safety significance.

Inspection Report# : [2006004](#) (pdf)

Significance:  Mar 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Maintain Leak Detection Capability

The inspectors identified a non-cited violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) for the failure to maintain the design basis and configuration control for the detection of recirculation system leakage from the containment sump isolation valve cylinders (valves SI-850A and SI-850B for Units 1

and 2). This issue was initially identified by the inspectors during walkdowns and reviews of the containment sump recirculation piping in November/December 2005; however, at that time, the issue was not recognized by the licensee as part of the design basis of the facility. During a review of a request for additional information from the Office of Nuclear Reactor Regulation regarding a November 8, 2005, 10 CFR 50.72 report, the licensee subsequently determined that, in fact, leakage detection of the containment sump isolation valve cylinders through the pipe sleeve into the auxiliary building was part of the system's design and licensing basis.

At the end of the inspection, the licensee had not completed a causal evaluation; however, several interim actions were in place to address the operable, but non-conforming condition. The licensee had established a corrective action to determine how to resolve this non-conforming issue.

The inspectors concluded that this finding is greater than minor because it was associated with the design control and the equipment performance attributes of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding is a design or qualification deficiency confirmed to not result in loss of function per NRC Generic Letter 91-18. Therefore, the inspectors determined that this finding is a licensee performance deficiency of very low risk significance (Green).

Inspection Report# : [2006002](#) (*pdf*)



Significance: Mar 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Maintain Safety Function for SI-850 Valves in the Closed Direction

The inspectors identified a non-cited violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) for the failure to ensure the safety function of the containment sump isolation valves was maintained and tested in accordance with the design and licensing basis. This issue was initially identified by the inspectors during walkdowns and reviews of the containment sump recirculation piping in November/December 2005; however, at that time, the issue was not recognized by the licensee as part of the design and licensing basis of the facility. The licensee subsequently determined that the design and licensing basis for the closed safety function of these valves was not properly implemented in accordance with the facility's license and required codes or standards.

The licensee performed a causal evaluation and developed several interim and long-term corrective actions. Those corrective actions included: revision of the inservice testing program documents for testing the valves; revision of the design basis document (DBD) for the residual heat removal system; reinforcement of the expectations with engineering staff on the use of DBDs and inservice testing background documents; and development of a project plan to update the inservice test background document.

The inspectors concluded that this finding is greater than minor because it was associated with the design control, equipment performance and maintenance and testing procedure quality attributes of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding is a design or qualification deficiency confirmed to not result in a loss of function per NRC Generic Letter 91-18. Therefore, the inspectors determined that this finding is a licensee performance deficiency of very low risk significance.

Inspection Report# : [2006002](#) (*pdf*)



Significance: Mar 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Address Effects of Elevated Temperatures on Control Room Instruments

The inspectors identified a non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) when the licensee failed to consider the effects of elevated control room temperatures on instrument inaccuracies following a design basis loss-of-coolant accident, which could potentially affect mitigation of the event. During the Problem Identification and Resolution Inspection documented in NRC Inspection Report 2005012, the inspectors identified an unresolved item (URI) related to the effects of elevated control room temperatures on instrument accuracies and accident mitigation during a design basis loss of coolant accident. Subsequent

review and root cause evaluation determined that the licensee had failed to consider the effects of elevated control room temperatures on instrument inaccuracies for a calculation associated with the reconstitution project.

The licensee entered the issue in its corrective action system and performed a root cause analysis. Corrective actions to prevent recurrence included strengthening review requirements for the 30 percent, 60 percent and Owner Acceptance Review of vendor-supplied calculations for the calculation reconstitution project.

The inspectors concluded that the finding was greater than minor, as the finding represented a programmatic deficiency associated with the calculation reconstitution project that, if left uncorrected, would become a more significant concern due to calculation errors. The design deficiency did not result in a loss of function per Generic Letter 91-18 as sufficient emergency diesel generators remained available through administrative controls to provide electrical power for operators to promptly restart the control room ventilation system, hence the finding screened as very low safety significance (Green).
Inspection Report# : [2006002](#) (*pdf*)

Significance: R Mar 24, 2003

Identified By: NRC

Item Type: VIO Violation

Apparent violation of 10 CFR Part 50, Appendix B, Criterion III, for the failure to establish the appropriate design control measures for the installation of orifices to the AFW recirculation lines

An apparent violation was identified, in part, through a self-revealing event when decreased auxiliary feedwater pump recirculation flow was noted during post-maintenance testing. Subsequent licensee and NRC review of the event determined that the licensee had installed incorrectly designed orifices in each of the pump recirculation lines. The orifices, due to small clearances, were susceptible to plugging. The primary causes of this finding were inadequacies in the licensee's design process and the licensee's implementation of the process, including the identification of system design requirements and the development of supporting safety evaluations.

The issue has been preliminarily determined to have high safety significance (Red). Following installation of the inadequately designed orifices, the entire auxiliary feedwater system was susceptible to a common mode failure during operations using service water. Failure of auxiliary feedwater during several initiating events could lead to core damage. The installation of the incorrectly designed orifices in the recirculation lines is an apparent violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

On December 11, 2003, the final significance determination letter was issued for this finding. It was determined that this is a RED finding for Unit 2 and a YELLOW finding for Unit 1. For tracking purposes, identical findings were opened for Unit 1 (designated as YELLOW) and Unit 2 (designated as RED).

As indicated in a letter to the licensee dated November 30, 2006 (ADAMS Accession Number ML063350059) closing out Confirmatory Action Letter 3-04-001, Revision 1, the NRC has completed its inspection followup of this issue, which had been categorized as a Red inspection finding for Unit 2.

Inspection Report# : [2002015](#) (*pdf*)

Inspection Report# : [2006013](#) (*pdf*)

Significance: R Feb 28, 2002

Identified By: Licensee

Item Type: VIO Violation

POTENTIAL COMMON MODE FAILURE OF AUXILIARY FEEDWATER PUMPS DUE TO INADEQUATE PROCEDURAL GUIDANCE

Units 1 and 2. The licensee identified a potential common mode failure of the auxiliary feedwater pumps due to operator actions specified in plant procedures. The team identified that procedural guidance provided to operators was inadequate to prevent such a common mode failure. In addition, the team identified that the licensee had seven opportunities, from 1981 through 1997, to identify the problem and take appropriate corrective actions. After considering the information developed during the inspection and the information the licensee provided at the April 29, 2002, regulatory conference, the NRC concluded that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, was appropriate for two of the originally proposed seven examples. The failures to provide adequate procedural guidance and to take appropriate corrective actions are both a violation of 10 CFR Part 50, Appendix B, Criteria V and XVI. This issue has been determined to have high

safety significance (Red). A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies. The final significance determination for the Red finding and Notice of Violation were issued to the licensee in a letter dated July 12, 2002.

Inspection Report 50-266/02-15; 50-301/02-15, issued April 2, 2003, documented the NRC decision that this finding is not an Old Design Issue.

As indicated in a letter to the licensee dated November 30, 2006 (ADAMS Accession Number ML063350059) closing out Confirmatory Action Letter 3-04-001, Revision 1, the NRC has completed its inspection followup of this issue, which had been categorized as a Red inspection finding for Units 1 and 2.

Inspection Report# : [2001017](#) (*pdf*)

Inspection Report# : [2003003](#) (*pdf*)

Inspection Report# : [2006013](#) (*pdf*)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Significance:  Dec 15, 2006

Identified By: NRC

Item Type: FIN Finding

Untimely Completion of Three RCEs Involving Radiation Protection

The inspectors identified a finding of very low safety significance for the licensee's untimely completion of three root cause evaluations in the radiation protection area. The 3 evaluations were completed in 8-9 months instead of the 30 days stated in the corrective action program administrative procedure. Several due date extensions had been approved by station management early in the conduct of the evaluations and they eventually went overdue before they were completed. No violation of NRC requirements was identified. The licensee entered this finding into its corrective action program for evaluation.

The inspectors concluded that the issue of allowing the completion time for the three root cause evaluations to exceed the 30-day limit in the procedure is a finding that if left uncorrected would become a more significant safety concern, and thus, is a finding that is greater than minor. Because the finding did not involve an overexposure, a substantial potential for an overexposure, and a compromise of the ability to assess dose, it is of very low safety significance. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of human performance within the component of work control and the aspect of coordinating work activities.

Inspection Report# : [2006015](#) (*pdf*)

Public Radiation Safety

Significance:  Sep 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Conditional Release of Radioactively Contaminated Material, a Check Source Mechanism

A self-revealed finding of very low safety significance that was a non-cited violation of 10 CFR 20.1501 was identified for the licensee's failure to perform a survey prior to unconditionally releasing a radioactively contaminated Check Source Mechanism (CSM-1) from the plant. Corrective actions taken by the licensee for this finding included updating the model work orders to include radiological controls for secondary systems.

The issue is greater than minor because it was associated with the program/process attribute of the Public Radiation Safety Cornerstone and affected the cornerstone objective to ensure adequate protection of public health and safety from exposure to radioactive materials released into the public domain as a result of routine civilian nuclear reactor operation. The inspectors determined that the finding did not involve a radioactive transportation shipment, that public exposure did not exceed 0.005 rem, and there were less than five such occurrences. Consequently, the inspectors concluded that this finding was of very low safety significance.

Inspection Report# : [2006005](#) (*pdf*)

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

Significance: N/A Dec 31, 2006

Identified By: NRC

Item Type: AV Apparent Violation

NRC to Review Items in Confirmatory Order Dated January 3, 2007, for Employment Discrimination Settlement

In a letter dated January 3, 2007 (ADAMS Accession Number ML063630336), the NRC issued a Confirmatory Order to the licensee as part of a settlement agreement through the NRC's Alternative Dispute Resolution (ADR) process. The NRC investigated an alleged violation of 10 CFR 50.7, "Employee Protection," to determine whether a senior reactor operator was the subject of retaliation for raising a nuclear safety concern in the licensee's corrective action program. This issue was resolved through the NRC's ADR program and will be tracked as Apparent Violation (AV) 05000266/2006013-05; 05000301/2006013-05 pending NRC review of the licensee's completion of items specified in the Confirmatory Order.

Inspection Report# : [2006013](#) (*pdf*)

Significance: N/A Dec 15, 2006

Identified By: NRC

Item Type: FIN Finding

Biennial Problem Identification and Resolution Inspection

The team concluded that the licensee's program for the identification and resolutions of problems was functioning appropriately and had improved since the previous NRC PI&R expanded team inspection conducted in late 2005. The licensee was identifying plant problems at an appropriately low level, although, the inspectors noted that the threshold for entering wall thinning issues into the program was high relative to the level at which other issues were entered. The inspectors identified three findings in the area of prioritization and evaluation of issues: one for an inadequate procedure for inspection of service water pipe, one for an inadequate extent-of-condition review for boric acid corrosion on valves; and one for untimely completion of three root cause evaluations. In the area of effectiveness of corrective actions, the inspectors concluded that a licensee-developed training course on engineer rigor was well developed and implemented and that corrective actions for three previous issues may need additional management attention to ensure timely completion. The licensee's use of operating experience and self-assessments and audits was found to be appropriate. From interviews conducted during this inspection, the inspectors concluded that workers at Point Beach felt free to input nuclear safety findings into the corrective action program.

Inspection Report# : [2006015](#) (*pdf*)

G

Jun 30, 2006

Significance:

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a 50.59 Evaluation of Increased Design Loads on the Auxiliary Building

The inspectors identified a Severity Level IV, Non-Cited Violation of 10 CFR 50.59(d)(1) for failure to perform a written evaluation of increased design loads on the crane and the auxiliary building. The licensee performed a calculation to demonstrate the capability of the auxiliary building to hold a single-failure-proof crane with a 125-ton load during a seismic event. After the inspectors identified that no written evaluation has been performed, the licensee completed the evaluation and concluded that a license amendment was not required as a result of increased design loads.

Because violations of 10 CFR 50.59 affect the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. In accordance with the NRC Enforcement Policy, this finding is determined to be more than minor because there was a reasonable likelihood that the change requiring the 10 CFR 50.59 evaluation would require NRC review and approval prior to implementation. This finding has been reviewed by NRC management and is determined to be a Green finding, of very low safety significance.

Inspection Report# : [2006004](#) (*pdf*)

Last modified : March 01, 2007

Point Beach 2

1Q/2007 Plant Inspection Findings

Initiating Events

Significance: SL-III Dec 31, 2006

Identified By: NRC

Item Type: VIO Violation

Failure to Update FSAR With Reactor Head Drop Analysis and Obtain NRC Approval

The inspectors identified an apparent violation for the failure of the licensee in 1983 to incorporate the results of an 1982 analysis of a postulated drop of the reactor vessel head on the vessel into the Final Safety Analysis Report (FSAR). The apparent violation is subject to the NRC's traditional enforcement process because it had the potential for impacting the NRC's ability to perform its regulatory function. After the problem was identified in early 2005, the licensee submitted a revised head drop analysis that the NRC reviewed and subsequently approved; evaluated the Unit 2 replacement vessel head against that analysis; updated its FSAR; and conducted a review to identify other instances where the FSAR may not have been updated.

This finding is considered greater than minor because the failure to update the FSAR as required by 10 CFR 50.71(e) resulted in the licensee not obtaining the necessary review and approval of the 1982 analysis, and in the removal and reinstallation of the original reactor heads from 1983 to 2004 without administrative controls similar to those established for head moves in 2005 and after. Also, the finding is associated with the design control attribute of the Initiating Events Cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown. Because findings involving 10 CFR 50.71(e) potentially affect the NRC's ability to perform its regulatory function, and reactor vessel head drop analysis issues are not suitable for Significance Determination Process analysis, this finding is being evaluated using the traditional enforcement process.

In a letter dated January 29, 2007, a Notice of Violation was issued for a Severity Level III violation of 10 CFR 50.71(e). There is no civil penalty.

Inspection Report# : [2006011](#) (*pdf*)

Significance:  Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Replacement Reactor Vessel Head Design Deficiencies

The inspectors identified a non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) when the licensee failed to assure from October 2002 to April 2005 that deviations in weight, a specific value used in analysis of the effects of a postulated accident, of the Unit 2 replacement reactor vessel head and head assembly upgrade package were controlled in accordance with the original design bases. One result of this failure was that the licensee's 10 CFR 50.59 evaluation completed in February 2005 for the replacement head was inadequate. The licensee entered the finding into its corrective action program, and revised head replacement project documents and the station design bases to account for the differences between the Unit 2 replacement vessel head and the original head. In addition, the licensee completed an adequate 10 CFR 50.59 evaluation. These actions were taken prior to the actual lift of the new head that occurred in June 2005.

The inspectors concluded that the finding is greater than minor because it was associated with the design control attribute of the Initiating Events Cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown. Consultation with the Region III Senior Reactor Analysts determined that reactor vessel head drop issues were not suitable for the Significance Determination Process analysis. Therefore, this finding has been reviewed by NRC management and is determined to be a Green finding, of very low significance. The inspectors also determined that a primary cause of this finding is related to the cross-cutting area of human performance.

Inspection Report# : [2006011](#) (*pdf*)

G**Significance:** Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Design Control for a Flooding Barrier During a Plant Modification

The inspectors identified a non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, "Design Control," having very low safety significance for the failure to maintain flooding barriers after drilling holes and installing conduit from the containment facade buildings to the auxiliary building during modification MR 04-013 "Charging Pump Variable Frequency Drive (VFD) Installation." As part of corrective actions, the licensee properly sealed the openings. The issue was entered into the corrective action program.

The finding is greater than minor because it was associated with the design control and flood hazard attributes of the Initiating Events cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. A flood in the auxiliary building could affect safety-related equipment and result in an upset of plant stability. Although the finding involved the degradation of a flooding barrier, the volume of any potential flooding was judged, based on the size of the hole, to be bounded by the existing internal flooding analysis for the auxiliary building, as well as the licensee's probabilistic risk assessment; hence, the finding screened as very low safety significance. This finding has a cross-cutting aspect in the area of human performance because resources were not provided to ensure accurate and up-to-date work packages for implementation of the modification.

Inspection Report# : [2006013](#) (*pdf*)**G****Significance:** Dec 31, 2006

Identified By: NRC

Item Type: FIN Finding

Inadequate Contractor Oversight Which Resulted in Damage to a Unit 2 Steam Generator Vent Line

A finding of very low safety significance was self-revealed on November 14, 2006, when unqualified contract crane technicians operated the Unit 2 polar crane and damaged the 'B' steam generator vent line with the main hook of the crane. The reactor was shutdown at the time of the event. As part of corrective actions, the licensee removed authorization for the technicians to operate the crane, ensured necessary procedural controls were implemented, and evaluated the damaged vent line. The issue was entered into the corrective action program. Subsequently, plant engineers concluded that the vent line remained operable, but degraded.

This finding is greater than minor because if left uncorrected it would become a more significant safety concern in that a significant upset of plant stability would have occurred had the crane hook damaged other, safety-related equipment. In addition, the finding is associated with the human performance attribute of the Initiating Events cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Because the transient initiator contributor was main steam vent piping damage, which did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available, the finding is considered to be of very low safety significance. The finding has a cross-cutting aspect in the area of human performance because the licensee's work practices failed to ensure adequate supervisory and management oversight of contractor work activities.

Inspection Report# : [2006013](#) (*pdf*)**G****Significance:** Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedural Controls for Manually Operated Breakers Located in Certain Control Panels

A finding and associated non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," having very low safety significance was self-revealed on October 16, 2006, during the out-of-service tagging of a manually operated breaker (MOB) in the Unit 2 control panel. The reactor was shutdown at the time of the event but at normal operating pressure and temperature. During the tagging, an adjacent breaker was inadvertently repositioned resulting in the opening of the pressurizer power-operated relief valve (PORV). About 63 gallons of reactor coolant were released through the valve to the pressurizer relief tank before operators repositioned the breaker and the valve re-closed. The released was categorized as a Notification of Unusual Event. The mispositioning was caused by a lack of adequate procedural controls for working in the control panels and a lack of knowledge by personnel as to the minimal force

required to open the MOBs. As part of corrective actions, the licensee replaced or protected the most risk significant MOBs, trained workers on the operating sensitivity of the breakers, and established controls governing work in the control panels around sensitive equipment. The issue was entered into the corrective action program and the licensee performed a root cause evaluation for this event.

This finding is greater than minor because if left uncorrected it would become a more significant safety concern in that the inadvertent re-positioning of other similar breakers in the main control room control panels would significantly upset plant stability. In addition, the finding is associated with the procedure quality and human performance attribute of the Initiating Events cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Because attributes such as core heat removal, inventory control, power availability, containment control, and reactivity guidelines were met, the finding screened as (Green) having very low safety significance. The finding has a cross-cutting aspect in the area of human performance because the licensee's control of work failed to incorporate into planned work activities job site conditions, including environmental conditions which may impact human performance, and the human-system interface, that is, the operator interface with the breakers in the close confines of the control panels.

Inspection Report# : [2006013](#) (*pdf*)

G

Significance: Jun 30, 2006

Identified By: NRC

Item Type: FIN Finding

Failure to Take Adequate Actions for Potential High Wind Conditions

A finding of very low safety significance was identified by the inspectors for failure to control loose materials in the protected area in the vicinity of the main and auxiliary transformers. No violation of NRC requirements occurred. Failure to take action to remove loose material in the protected area has problem identification and resolution cross-cutting aspects involving failure of assigned personnel to identify and correct potential tornado missiles that could be generated from such loose material in the vicinity of the main and auxiliary transformers. Once identified, the licensee initiated a corrective action program document to develop a surveillance procedure to remove loose materials before summer months when potential adverse weather was possible, performed walkdowns of the affected areas, and removed material which could become a potential hazard in high velocity winds and tornadoes.

The inspectors determined that the finding was more than minor because, if left uncorrected, the loose items adjacent to the main and auxiliary transformers would become a more significant safety concern. The issue is of very low safety significance because the finding did not contribute to the likelihood of a primary or secondary system loss of coolant accident initiator; the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available; and the finding did not increase the likelihood of a fire or internal or external flooding. The issue is not considered a violation of regulatory requirements because the finding did not affect safety-related structures, systems, or components.

Inspection Report# : [2006004](#) (*pdf*)

Mitigating Systems

G

Significance: Dec 15, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedure for Identifying Degraded Piping

The inspectors identified a finding of very low safety significance involving areas of service water piping where microbiologically induced corrosion was identified but the wall thicknesses of the pipe in those areas were not measured. An NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," was associated with this finding for failure to prescribe directions to ensure all areas of degradation identified were characterized. The licensee performed radiographic examination of safety-related piping in the service water system to identify and determine the extent of degradation and to take appropriate corrective action to maintain operability. However, the radiographic technique used did not provide information on the most severe (deepest) degradation in the section of pipe examined. Without this information, the licensee's evaluation of the piping integrity, actions to perform inspections of additional pipe

segments, and actions to perform more frequent inspection on the same section could be inappropriate. The licensee entered this finding into its corrective action program for evaluation.

This finding is greater than minor because it was associated with the procedure quality attribute of the Mitigating System cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the procedure did not require adequate characterization of the extent of microbiologically induced corrosion (MIC) in service water (SW) piping to ensure that MIC degradation would not result in failure of the SW piping pressure boundary. Because there were no active through-wall leaks in this system and no known degradation which exceeded the Code minimum wall thickness, the finding is of very low safety significance.

Inspection Report# : [2006015 \(pdf\)](#)

Significance:  Dec 15, 2006

Identified By: NRC

Item Type: FIN Finding

Inadequate Extent-of-Condition Review

The inspectors identified a finding of very low safety significance with no associated violation for an inadequate extent-of-condition review for boric acid leakage found in the last quarter of 2005 on the safety injection-850 valves (containment recirculation sump isolation valves). During the current inspection, the inspectors identified boric acid leakage on other valves that the licensee had not evaluated. The licensee entered this finding into its corrective action program.

This finding is greater than minor because failing to evaluate boric acid leakage would lead to component failure and had the potential to become a more significant safety concern. Because no safety function was lost, no Technical Specification train or maintenance rule safety function was lost, and there was no external event concerns. The finding is of very low safety significance. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of PI&R within the component of the corrective action program and the aspect of thorough evaluation of problems.

Inspection Report# : [2006015 \(pdf\)](#)

Significance:  Sep 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Emergency Core Cooling System Sump Flow Design Control Deficiencies

The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance when the licensee did not correctly interpret the results of calculations of the head available to drive flow across the emergency core cooling system (ECCS) sump screens and also did not identify and did not analyze for a postulated sump plugging condition as it affected net positive suction head (NPSH) for the residual heat removal (RHR) pumps. As a result, the licensee failed to maintain design margins for ECCS sump flow. The licensee completed a causal evaluation and developed corrective actions, including the implementation of compensatory measures to ensure sump outlet flow was limited to eliminate flashing and to ensure that adequate NSPH was available.

The inspectors concluded the finding is greater than minor because it was associated with the design control attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). This design control deficiency was confirmed not to result in loss of operability per "Part 9900, Technical Guidance, Operability Determination Process for Operability and Functional Assessment." Hence, the finding screened as of very low risk significance. The inspectors also determined that a primary cause of this finding is related to the cross-cutting area of human performance. The lack of engineering rigor associated with review of this calculation involved the cross-cutting component of resources in that personnel, procedures, and supervisory resources were not adequate to assure nuclear safety, and the cross-cutting aspect of maintaining long-term plant safety by maintenance of design margins specified in calculations. The licensee did not maintain adequate NPSH margin or preclude air intrusion, as the ECCS sump flow parameter (RHR pump flow during phase 2 recirculation following a postulated loss of coolant accident was not appropriately limited in the emergency operating procedures.

Inspection Report# : [2006005 \(pdf\)](#)

Significance:  Sep 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Containment Coatings Program Weaknesses

The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance when the licensee failed to assure that the limits of unqualified and degraded coatings within the containment sump zone of influence, as documented in the 1999 analyses of record, were correctly translated into specifications and plant procedures and that deviations since 1999 were appropriately controlled. Subsequently, the inspectors identified that the licensee had exceeded the design analysis limits associated with the quantities of degraded and unqualified coatings in containment. The licensee completed a causal evaluation and developed corrective actions, including the removal of degraded coatings and the revision of site procedures to include limits for degraded and unqualified coatings

The inspectors concluded the finding is greater than minor because it was associated with the design control attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). This design control deficiency was confirmed not to result in a loss of operability per "Part 9900, Technical Guidance, Operability Determination Process for Operability and Functional Assessment." Hence, the finding screened of as very low safety significance. The inspectors also determined that a primary cause of this finding is related to the cross-cutting area of human performance. The failure to appropriately maintain the amount of unqualified and degraded coatings in accordance with the analyses of record involved the cross-cutting component of resources for the failure to ensure that personnel, procedures, and supervisory resources were adequate to assure nuclear safety, and the cross-cutting aspect of maintaining long-term plant safety by maintenance of design margins specified in calculations supporting the design basis accidents.

Inspection Report# : [2006005](#) (*pdf*)

G

Significance: Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Potential Common Mode Failure Mechanism Due to Overdutied Circuit Breakers

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance involving electrical system short circuit studies. Specifically, the inspectors identified that the licensee failed to identify or analyze the potential consequences of faults on non-seismically protected circuits, or the potential for degradation of redundant trains due to a fault on a non-safety circuit that is routed in raceways associated with both redundant trains.

The inspectors determined that the finding was more than minor because the failure to identify and analyze unacceptable consequences of overdutied circuit breakers could impact their safety function. In the evaluation, The inspectors determined that the finding screened as Green because, as an immediate corrective action for this issue, the licensee performed an operability evaluation that determined that despite the failure to properly analyze the consequences of overdutied circuit breakers, there was sufficient cable impedance to assure that loss of redundant buses due to postulated faults would not occur.

Inspection Report# : [2006006](#) (*pdf*)

G

Significance: Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Conservative EDG Loading Calculation

The inspectors identified a finding of very low safety significance associated with a violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control." Specifically, Emergency Diesel Generator (EDG) Room exhaust fans, EDG diesel air start compressors, and additional loading caused by the EDG operating at frequencies above 60 Hertz (Hz) were not considered in the licensee's EDG loading calculation. The licensee determined that this issue was not an operability concern, because these additional loads did not cause the EDG to be overloaded during design basis accident conditions.

The issue was more than minor because the failure to identify loads that would be supplied during an accident condition could result in eventual overloading of the EDG. The finding screened as having very low significance (Green) because the inspectors answered "no" to all five questions under the Mitigating Systems Cornerstone column of the Phase 1 worksheet. After performing a calculation to support operability, it was determined that there were conservatisms and other

unnecessary loads in the EDG loading calculation that served to counteract the non-conservatism that were identified by the inspection team resulting in the EDG not exceeding any vendor load limitations

Inspection Report# : [2006006 \(pdf\)](#)

G

Significance: Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Lack of a 4 Hour SBO Coping Duration Heat-Up Calculation for the AFP Rooms

The inspectors identified a finding of very low safety significance associated with a violation of 10 CFR 50.63, "Loss of all Alternating Current Power." Specifically, the licensee never performed a calculation that evaluated the effects of loss of ventilation on the Auxiliary Feedwater Pump (AFP) room during a Station Blackout (SBO). The AFP rooms, which each house a turbine driven AFP (TDAFP), had not been evaluated for the heatup that would occur during the SBO 4 hour coping duration. In response to the inspector's concerns, the licensee performed informal calculations to provide reasonable assurance that the heatup in the room during an SBO would not adversely affect the equipment.

The issue was more than minor because the licensee had not maintained a heatup calculation for the TDAFP room that assessed the effects of heatup on safe shutdown equipment as required for station blackout. The finding screened as having very low significance (Green) because the inspectors answered "no" to all five questions under the Mitigating Systems Cornerstone column of the Phase 1 worksheet.

Inspection Report# : [2006006 \(pdf\)](#)

G

Significance: Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Condensate Storage Tank Vortexing Calculation Did Not Bound Station Blackout Scenario

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) involving the useable volume in the condensate storage tank (CST). Specifically, the inspectors identified that the licensee's calculation to show that there would not be vortexing in the CST was not bounding for the station blackout scenario, which was the basis for the CST volume stated in the Technical Specifications. The licensee's corrective actions included verifying the CST contained a sufficient volume to prevent vortexing in support of a station blackout scenario, and initiated actions to perform a formal calculation and to establish an administrative limit to increase the available margin from the Technical Specification limit.

The finding was more than minor because the failure to adequately evaluate the CST vortex limit could have led to an insufficient useable volume in the CST preventing the auxiliary feedwater system from performing its function during a station blackout scenario and could have affected the mitigating systems cornerstone objective of design control. The finding was of very low safety significance based on the results of the licensee's analysis and screened as Green using the SDP Phase 1 screening worksheet.

Inspection Report# : [2006006 \(pdf\)](#)

G

Significance: Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Unverified Fouling Factor Assumption for Containment Fan Coolers

The team identified a Green non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion XI, Test Control, relating to the safety-related Containment Fan Coolers (CFC) for not assuring that the fouling factor inside the tubes was not maintained above the minimum specified analytical limit to prevent boiling of Service Water inside the coolers' tubes during accident conditions. Specifically, the licensee visually inspected the coolers and did not establish a specific criterion for accepting a fouling factor not lower than the established minimum of 0.0003 ft²-hr-°F/Btu to prevent boiling inside the tubes.

This finding was greater than minor because the current method of testing the fan coolers did not demonstrate that the existing fouling was such to prevent boiling. The finding screened as Green because, as an immediate corrective action, the licensee demonstrated through an evaluation that if boiling occurred, it will occur first in the upper tubes before the condition of the water in the lower tubes will cause boiling. This would result in excess service water flow to the lower

tubes such that the fan coolers could still perform their safety function.

Inspection Report# : [2006006 \(pdf\)](#)

Significance:  Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Reactor Water Storage Tank/Spent Fuel Pool Pipe Support Calculation Deficiencies

The team identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance involving a modification that upgraded the Reactor Water Storage Tank/Spent Fuel Pool recirculation loop small bore piping and the Units 1 and 2 Reactor Water Storage Tank cross connect branches from the loop to Seismic Class I piping. Specifically, the inspection team found numerous non-conservative technical errors and calculation omissions in seismic design basis analysis calculations that supported this modification. This issue was entered into the licensee's corrective action system.

The issue was more than minor because the presence of these non-conservative calculational deficiencies resulted in seismic design basis analysis calculations to be re-performed to assure that the pipe supports would function as required during the design basis seismic event. The finding screened as having very low significance (Green) because the inspectors answered "no" to all five questions under the Mitigating Systems Cornerstone column of the Phase 1 worksheet. Specifically, after re-performing the calculations for the supports that were called into question by the inspection team, the licensee was able to show that enough margin was still available to support the loads that would be seen during the design basis seismic event.

Inspection Report# : [2006006 \(pdf\)](#)

Significance:  Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a 50.59 Evaluation for Compensatory Measures Described in Operability Recommendation

The inspectors identified a Severity Level IV, Non-Cited Violation of 10 CFR 50.59(d)(1) for the licensee's failure to perform an evaluation for compensatory actions taken to maintain the closed function of the emergency core cooling system (ECCS) containment sump isolation valves. Specifically, the licensee established compensatory actions in the event remote operation from the control room of the containment sump recirculation isolation valves (1SI-850A, 1SI-850B, 2SI-850A and 2SI-850B) was ineffective during plant minimum or degraded voltage conditions. The licensee had not completed a causal evaluation by the end of the inspection period; however, remedial corrective actions to address certain aspects of this issue had been implemented.

Because violations of 10 CFR 50.59 affect the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. In accordance with the NRC Enforcement Policy, this finding is determined to be more than minor because there was a reasonable likelihood that the change requiring the 10 CFR 50.59 evaluation would require NRC review and approval prior to implementation. This finding has been reviewed by NRC management and is determined to be a Green finding, of very low safety significance.

Inspection Report# : [2006004 \(pdf\)](#)

Significance:  Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain and Implement Adequate Procedures for Control Room Ventilation Testing

The inspectors identified a Non-Cited Violation of Technical Specification 5.4.1 for the failure to have adequately established, implemented, and maintained procedures for Technical Specification Surveillance testing of the control room emergency filtration system. The inspectors observed the performance of the 18-month surveillance for testing of the control room emergency filtration system, per procedure HPIP-115.4. The inspectors noted that the visual inspection, charcoal sampling, collection of the fan flow data, and the compilation/evaluation of fan flow measurement data were conducted but not as specified in the procedure.

The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of problem identification and resolution. The last performance of this test, conducted 18 months prior, revealed numerous performance

deficiencies, which included an inadequate procedure and the failure to properly implement portions of the procedure. However, the corrective actions taken for the deficiencies identified during the last performance failed to correct the procedure maintenance and implementation issues associated with procedure HPIP-11.54. The licensee had not completed a causal evaluation by the end of the inspection period; however, the licensee had implemented remedial corrective actions to address certain aspects of this issue.

The inspectors concluded that the finding is greater than minor because it is associated with the procedure quality attribute for maintenance and testing (pre-event) procedures of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated this finding using the significance determination process and determined that this finding is a licensee performance deficiency of very low risk significance (Green).

Inspection Report# : [2006004](#) (*pdf*)

Significance:  Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Update and Maintain the Final Safety Analysis Report as Required by 10 CFR 50.71(e)

The inspectors identified a Severity Level IV, Non-Cited Violation of 10 CFR Part 50.71(e) for the self-revealed failure to update the Final Safety Analysis Report (FSAR) to assure that the information in the report was the latest information developed and contained all changes necessary to reflect information and analyses submitted to the NRC. This finding was self-revealed following the inspectors' identification of numerous FSAR inaccuracies concerning licensee responses to generic docketed correspondence to the commission. This was further corroborated by a follow-up licensee self-assessment and streaming analysis conducted by the licensee. As a result, the licensee initiated a root cause evaluation which also identified the failure to update the FSAR in response to licensee credited actions, new NRC regulations, programmatic licensee commitments, and certain license amendment safety evaluation reports.

The inspectors determined that a primary cause of the finding was related to the cross-cutting element of human performance due to the failure to have processes and procedures to maintain the current licensing basis and a lack of knowledge by plant staff of regulatory requirements. The licensee has taken immediate remedial corrective actions to address several issues, including the development of a site policy and procedures which defined the current licensing basis. In addition, the licensee has planned comprehensive corrective actions, including a detailed project scope to update the FSAR.

Because violations of 10 CFR 50.71(e) affect the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. In accordance with the NRC Enforcement Policy, this finding is determined to be more than minor because a failure to update the FSAR could have had a material impact on safety or licensed activities. This finding has been reviewed by NRC management and is determined to be a Green finding, of very low safety significance.

Inspection Report# : [2006004](#) (*pdf*)

Barrier Integrity

Significance:  Mar 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain Design Margin for Control Room Emergency Filtration Fan Thermal Overload Trips

A non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, "Design Control," having very low safety significance was self-revealed for the failure to maintain sufficient design margin for the expected running currents of the control room emergency filtration system fans to their thermal overload trip settings. This occurred due to design errors in a modification that replaced the fans in October 2006. Control Room Emergency Filtration System (CREFS) Fan W-1-B tripped on a breaker thermal overload during surveillance testing in February 2007 with low outside ambient air temperature (approximately negative 11°Fahrenheit). Licensee analyses also demonstrated that a trip of fan W-14A could have occurred for the combination of low ambient temperature and degraded grid voltage. The licensee took immediate

corrective actions to replace the breaker thermal overloads with thermal overloads of a higher setting as a result of troubleshooting and evaluations performed following the trip of the W-14B fan. The issue was entered into the licensee's corrective action program and a root cause evaluation was subsequently performed.

The finding is greater than minor because it is associated with the attribute of maintaining radiological barrier functionality of the control room and affected the Barrier Integrity cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Loss of CREFS fans during a release could result in increased dose to the operators in the control room potentially affecting control room habitability. Although the finding involved a potential failure of the CREFS to provide its filtration function, the simultaneous occurrence of low outside air temperature, degraded grid voltage, and a radiological release is of very low probability. The finding for the failure to provide the correct thermal overload trip setting is a design deficiency that has a cross-cutting aspect in the area of human performance in that resources were not effective in maintaining long-term plant safety by maintenance of design margins.

Inspection Report# : [2007002](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Significance:  Dec 15, 2006

Identified By: NRC

Item Type: FIN Finding

Untimely Completion of Three RCEs Involving Radiation Protection

The inspectors identified a finding of very low safety significance for the licensee's untimely completion of three root cause evaluations in the radiation protection area. The 3 evaluations were completed in 8-9 months instead of the 30 days stated in the corrective action program administrative procedure. Several due date extensions had been approved by station management early in the conduct of the evaluations and they eventually went overdue before they were completed. No violation of NRC requirements was identified. The licensee entered this finding into its corrective action program for evaluation.

The inspectors concluded that the issue of allowing the completion time for the three root cause evaluations to exceed the 30-day limit in the procedure is a finding that if left uncorrected would become a more significant safety concern, and thus, is a finding that is greater than minor. Because the finding did not involve an overexposure, a substantial potential for an overexposure, and a compromise of the ability to assess dose, it is of very low safety significance. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of human performance within the component of work control and the aspect of coordinating work activities.

Inspection Report# : [2006015](#) (*pdf*)

Public Radiation Safety

Significance:  Sep 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Conditional Release of Radioactively Contaminated Material, a Check Source Mechanism

A self-revealed finding of very low safety significance that was a non-cited violation of 10 CFR 20.1501 was identified for the licensee's failure to perform a survey prior to unconditionally releasing a radioactively contaminated Check Source Mechanism (CSM-1) from the plant. Corrective actions taken by the licensee for this finding included updating the model work orders to include radiological controls for secondary systems.

The issue is greater than minor because it was associated with the program/process attribute of the Public Radiation Safety Cornerstone and affected the cornerstone objective to ensure adequate protection of public health and safety from exposure to radioactive materials released into the public domain as a result of routine civilian nuclear reactor operation. The inspectors determined that the finding did not involve a radioactive transportation shipment, that public exposure did not exceed 0.005 rem, and there were less than five such occurrences. Consequently, the inspectors concluded that this finding was of very low safety significance.
Inspection Report# : [2006005](#) (*pdf*)

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

Significance: N/A Dec 31, 2006

Identified By: NRC

Item Type: AV Apparent Violation

NRC to Review Items in Confirmatory Order Dated January 3, 2007, for Employment Discrimination Settlement

In a letter dated January 3, 2007 (ADAMS Accession Number ML063630336), the NRC issued a Confirmatory Order to the licensee as part of a settlement agreement through the NRC's Alternative Dispute Resolution (ADR) process. The NRC investigated an alleged violation of 10 CFR 50.7, "Employee Protection," to determine whether a senior reactor operator was the subject of retaliation for raising a nuclear safety concern in the licensee's corrective action program. This issue was resolved through the NRC's ADR program and will be tracked as Apparent Violation (AV) 05000266/2006013-05; 05000301/2006013-05 pending NRC review of the licensee's completion of items specified in the Confirmatory Order.

Inspection Report# : [2006013](#) (*pdf*)

Significance: N/A Dec 15, 2006

Identified By: NRC

Item Type: FIN Finding

Biennial Problem Identification and Resolution Inspection

The team concluded that the licensee's program for the identification and resolutions of problems was functioning appropriately and had improved since the previous NRC PI&R expanded team inspection conducted in late 2005. The licensee was identifying plant problems at an appropriately low level, although, the inspectors noted that the threshold for entering wall thinning issues into the program was high relative to the level at which other issues were entered. The inspectors identified three findings in the area of prioritization and evaluation of issues: one for an inadequate procedure for inspection of service water pipe, one for an inadequate extent-of-condition review for boric acid corrosion on valves; and one for untimely completion of three root cause evaluations. In the area of effectiveness of corrective actions, the inspectors concluded that a licensee-developed training course on engineer rigor was well developed and implemented and that corrective actions for three previous issues may need additional management attention to ensure timely completion. The licensee's use of operating experience and self-assessments and audits was found to be appropriate. From interviews conducted during this inspection, the inspectors concluded that workers at Point Beach felt free to input nuclear safety findings into the corrective action program.

Inspection Report# : [2006015](#) (*pdf*)

Significance:  Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a 50.59 Evaluation of Increased Design Loads on the Auxiliary Building

The inspectors identified a Severity Level IV, Non-Cited Violation of 10 CFR 50.59(d)(1) for failure to perform a written evaluation of increased design loads on the crane and the auxiliary building. The licensee performed a calculation to

demonstrate the capability of the auxiliary building to hold a single-failure-proof crane with a 125-ton load during a seismic event. After the inspectors identified that no written evaluation has been performed, the licensee completed the evaluation and concluded that a license amendment was not required as a result of increased design loads.

Because violations of 10 CFR 50.59 affect the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. In accordance with the NRC Enforcement Policy, this finding is determined to be more than minor because there was a reasonable likelihood that the change requiring the 10 CFR 50.59 evaluation would require NRC review and approval prior to implementation. This finding has been reviewed by NRC management and is determined to be a Green finding, of very low safety significance.

Inspection Report# : [2006004](#) (*pdf*)

Last modified : June 01, 2007

Point Beach 2

2Q/2007 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Appropriate Maintenance on Air-Operated Valve Positioner Linkage

A self-revealing finding and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, “Instructions , Procedures, and Drawings,” having very low safety significance (Green), was identified for failure to have procedures appropriate to the circumstances for maintenance on air-operated valve positioners, when hardware attaching the connecting link between the Unit 1 “B” feedwater regulating valve positioner and actuator became disconnected resulting in loss of control of the valve. Specifically, there were no procedures that ensured that positioner arm hardware was properly secured. The licensee repaired valve positioners as required, performed an extent-of-condition review for similar valve positioners and is performing a root cause evaluation.

The inspectors concluded the finding is greater than minor because the finding was associated with the equipment performance attribute of the Initiating Events Cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The transient initiator contributor was a reactor trip that did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. Consequently, the finding is considered to be of very low safety significance (Green). The inspectors also determined that the primary cause of this finding is related to the cross-cutting area of human performance (H.2.(c)). Specifically, under the component of resources, the licensee failed to ensure complete, accurate, and up-to-date procedures and work packages for work on air-operated valve positioners were available.

Inspection Report# : [2007003](#) (*pdf*)

Significance:  Mar 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Take corrective Actions for Cold Weather Issues Prior to the Onset of Cold Weather

The inspectors identified a finding and associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion XVI, “Corrective Action,” having very low safety significance (Green) for the failure to take prompt corrective actions to address a potential cold weather issue initially identified in October 2006 and again in January 2007. The failure to take prompt corrective actions led to the formation of ice on offsite power and plant equipment cable trays and cabling. The sheets of ice were also in close proximity to the Unit 2 Refueling Water Storage Tank level indicators and outlet piping. The licensee initiated condition reports and took immediate corrective actions and had planned additional corrective actions based on a causal evaluation.

The finding is greater than minor because if left uncorrected the finding would become a more significant safety concern in that the formation of ice in the facade building in this case could have affected safety-related equipment. In addition, the finding is associated with the external factors attribute of the Initiating Events cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Because the significant ice buildup in the Unit 2 facade was an external factor and transient initiator contributor, and did not contribute to both the likelihood of both a reactor trip and that mitigation equipment or functions would not be available, the finding is considered to be of very low safety significance (Green). This finding has a cross-cutting aspect in the area of problem identification and resolution because the licensee did not take appropriate corrective actions in a timely manner, commensurate with their safety significance and complexity.

Inspection Report# : [2007002](#) (*pdf*)

Significance: SL-III Dec 31, 2006

Identified By: NRC

Item Type: VIO Violation

Failure to Update FSAR With Reactor Head Drop Analysis and Obtain NRC Approval

The inspectors identified an apparent violation for the failure of the licensee in 1983 to incorporate the results of an 1982 analysis of a postulated drop of the reactor vessel head on the vessel into the Final Safety Analysis Report (FSAR). The apparent violation is subject to the NRC's traditional enforcement process because it had the potential for impacting the NRC's ability to perform its regulatory function. After the problem was identified in early 2005, the licensee submitted a revised head drop analysis that the NRC reviewed and subsequently approved; evaluated the Unit 2 replacement vessel head against that analysis; updated its FSAR; and conducted a review to identify other instances where the FSAR may not have been updated.

This finding is considered greater than minor because the failure to update the FSAR as required by 10 CFR 50.71(e) resulted in the licensee not obtaining the necessary review and approval of the 1982 analysis, and in the removal and reinstallation of the original reactor heads from 1983 to 2004 without administrative controls similar to those established for head moves in 2005 and after. Also, the finding is associated with the design control attribute of the Initiating Events Cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown. Because findings involving 10 CFR 50.71(e) potentially affect the NRC's ability to perform its regulatory function, and reactor vessel head drop analysis issues are not suitable for Significance Determination Process analysis, this finding is being evaluated using the traditional enforcement process.

In a letter dated January 29, 2007, a Notice of Violation was issued for a Severity Level III violation of 10 CFR 50.71 (e). There is no civil penalty.

Inspection Report# : [2006011](#) (*pdf*)

G

Significance: Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Replacement Reactor Vessel Head Design Deficiencies

The inspectors identified a non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance (Green) when the licensee failed to assure from October 2002 to April 2005 that deviations in weight, a specific value used in analysis of the effects of a postulated accident, of the Unit 2 replacement reactor vessel head and head assembly upgrade package were controlled in accordance with the original design bases. One result of this failure was that the licensee's 10 CFR 50.59 evaluation completed in February 2005 for the replacement head was inadequate. The licensee entered the finding into its corrective action program, and revised head replacement project documents and the station design bases to account for the differences between the Unit 2 replacement vessel head and the original head. In addition, the licensee completed an adequate 10 CFR 50.59 evaluation. These actions were taken prior to the actual lift of the new head that occurred in June 2005.

The inspectors concluded that the finding is greater than minor because it was associated with the design control attribute of the Initiating Events Cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown. Consultation with the Region III Senior Reactor Analysts determined that reactor vessel head drop issues were not suitable for the Significance Determination Process analysis. Therefore, this finding has been reviewed by NRC management and is determined to be a Green finding, of very low significance. The inspectors also determined that a primary cause of this finding is related to the cross-cutting area of human performance.

Inspection Report# : [2006011](#) (*pdf*)

G

Significance: Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Design Control for a Flooding Barrier During a Plant Modification

The inspectors identified a non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, "Design Control," having very low safety significance for the failure to maintain flooding barriers after drilling holes and installing

conduit from the containment facade buildings to the auxiliary building during modification MR 04-013 "Charging Pump Variable Frequency Drive (VFD) Installation." As part of corrective actions, the licensee properly sealed the openings. The issue was entered into the corrective action program.

The finding is greater than minor because it was associated with the design control and flood hazard attributes of the Initiating Events cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. A flood in the auxiliary building could affect safety-related equipment and result in an upset of plant stability. Although the finding involved the degradation of a flooding barrier, the volume of any potential flooding was judged, based on the size of the hole, to be bounded by the existing internal flooding analysis for the auxiliary building, as well as the licensee's probabilistic risk assessment; hence, the finding screened as very low safety significance. This finding has a cross-cutting aspect in the area of human performance because resources were not provided to ensure accurate and up-to-date work packages for implementation of the modification.

Inspection Report# : [2006013](#) (*pdf*)

Significance:  Dec 31, 2006

Identified By: NRC

Item Type: FIN Finding

Inadequate Contractor Oversight Which Resulted in Damage to a Unit 2 Steam Generator Vent Line

A finding of very low safety significance was self-revealed on November 14, 2006, when unqualified contract crane technicians operated the Unit 2 polar crane and damaged the 'B' steam generator vent line with the main hook of the crane. The reactor was shutdown at the time of the event. As part of corrective actions, the licensee removed authorization for the technicians to operate the crane, ensured necessary procedural controls were implemented, and evaluated the damaged vent line. The issue was entered into the corrective action program. Subsequently, plant engineers concluded that the vent line remained operable, but degraded.

This finding is greater than minor because if left uncorrected it would become a more significant safety concern in that a significant upset of plant stability would have occurred had the crane hook damaged other, safety-related equipment. In addition, the finding is associated with the human performance attribute of the Initiating Events cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Because the transient initiator contributor was main steam vent piping damage, which did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available, the finding is considered to be of very low safety significance. The finding has a cross-cutting aspect in the area of human performance because the licensee's work practices failed to ensure adequate supervisory and management oversight of contractor work activities.

Inspection Report# : [2006013](#) (*pdf*)

Significance:  Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedural Controls for Manually Operated Breakers Located in Certain Control Panels

A finding and associated non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," having very low safety significance was self-revealed on October 16, 2006, during the out-of-service tagging of a manually operated breaker (MOB) in the Unit 2 control panel. The reactor was shutdown at the time of the event but at normal operating pressure and temperature. During the tagging, an adjacent breaker was inadvertently repositioned resulting in the opening of the pressurizer power-operated relief valve (PORV). About 63 gallons of reactor coolant were released through the valve to the pressurizer relief tank before operators repositioned the breaker and the valve re-closed. The released was categorized as a Notification of Unusual Event. The mispositioning was caused by a lack of adequate procedural controls for working in the control panels and a lack of knowledge by personnel as to the minimal force required to open the MOBs. As part of corrective actions, the licensee replaced or protected the most risk significant MOBs, trained workers on the operating sensitivity of the breakers, and established controls governing work in the control panels around sensitive equipment. The issue was entered into the corrective action program and the licensee performed a root cause evaluation for this event.

This finding is greater than minor because if left uncorrected it would become a more significant safety concern in

that the inadvertent re-positioning of other similar breakers in the main control room control panels would significantly upset plant stability. In addition, the finding is associated with the procedure quality and human performance attribute of the Initiating Events cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Because attributes such as core heat removal, inventory control, power availability, containment control, and reactivity guidelines were met, the finding screened as (Green) having very low safety significance. The finding has a cross-cutting aspect in the area of human performance because the licensee's control of work failed to incorporate into planned work activities job site conditions, including environmental conditions which may impact human performance, and the human-system interface, that is, the operator interface with the breakers in the close confines of the control panels.

Inspection Report# : [2006013](#) (*pdf*)

Mitigating Systems

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement Work Instructions for Preventive Maintenance on Safety-Related Battery Chargers

The inspectors identified a NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for failure to accomplish required preventive maintenance resulting in the D-108 Station Battery output becoming unstable on several occasions. In January 2007, the D-09 Battery Charger also failed as a result of failure to perform scheduled preventive maintenance. The licensee initiated condition reports, took immediate corrective actions to repair the chargers and is performing an apparent cause evaluation.

The inspectors concluded that the finding is greater than minor because if left uncorrected, the finding would become a more significant safety concern, in that, failures of safety-related battery chargers can significantly challenge the vital 125V DC system. In addition, the finding is associated with the equipment performance attribute of the Mitigating System cornerstone and affects the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences, (such as, core damage). Since the finding is not a loss of system safety function and is not an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time, the finding is considered to be of very low safety significance (Green). The inspectors also determined that the primary cause of this finding is related to the cross-cutting area of human performance (H.3(b)). Specifically, the licensee did not appropriately coordinate work activities to support long-term equipment reliability and maintenance scheduling, which was not more preventive than reactive, as critical preventative maintenance for battery chargers was not performed.

Inspection Report# : [2007003](#) (*pdf*)

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Program for Preventive Maintenance of Breaker Mechanism Operated Control Switches

The inspectors identified a NCV of 10 CFR Part 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," of very low safety significance (Green), for the failure to incorporate available internal and external Operating Experience (OE) pertaining to 4.16kV switchgear cubicle Mechanism Operated Control (MOC) switch assemblies. Preventive maintenance procedures for Westinghouse 4.16kV switchgear cubicles had not been revised to incorporate important MOC switch linkage measurements, adjustments and verification of contact position. The licensee initiated condition reports and is revising procedures to incorporate required preventive maintenance.

The inspectors concluded that the finding is greater than minor, because, if left uncorrected, the finding would become a more significant safety concern. The finding also affects the procedure quality attribute of the Mitigating System cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (such as, core damage). Since the finding is not a loss of system safety function

and is not an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time, the finding is considered to be of very low safety significance (Green). Additionally, the inspectors determined that the contributing cause of the finding is related to the cross-cutting area of Problem Identification and Resolution within the component of OE (P.2(b)). The licensee did not implement and institutionalize OE through changes to station processes and procedures, as appropriate preventive maintenance procedures and routines were not established. Inspection Report# : [2007003](#) (*pdf*)

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to have Procedures Appropriate to the Circumstances for Terry Turbine Overhauls

The inspectors identified a finding of very low safety significance and a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to ensure that procedures associated with the maintenance of the TDAFW turbines were appropriate to the circumstances. Specifically, the licensee's maintenance overhaul procedure did not address the following significant issues: 1) specify acceptance criteria and as-left requirements for thrust bearing axial clearance; 2) specify instructions to ensure the proper setting and critical dimensions for the proper pump to turbine coupling stretch; 3) correctly establish the turbine to wheel nozzle lap setting; and 4) specify proper placement of insulation on the turbine. The licensee entered the issue into their corrective action program and took immediate corrective actions. At the end of the inspection period the licensee continued to evaluate the causes and corrective actions to address this finding.

The finding was more than minor because, if left uncorrected, the issue would have become a more significant safety concern. In addition, it affected the Mitigating Systems attributes of equipment performance availability and reliability, and maintenance procedure quality, as well as the Mitigating Systems cornerstone objective of ensuring the reliability of systems. The inspectors determined this programmatic finding was not a design qualification deficiency resulting in a loss of function per Generic Letter 91-18, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk-significant due to a seismic, fire, flooding, or severe weather initiating event. Therefore, the finding was considered to be of very low safety significance (Green). The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee failed to ensure that procedures were adequate and accurate to assure nuclear safety (H.2(c)).

Inspection Report# : [2007008](#) (*pdf*)

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: FIN Finding

Failure to have Specific Formal Training for Maintenance Craft on Terry Turbine Overhauls

The inspectors identified a finding of very low significance (Green) with no associated violation for the failure to provide appropriate training for maintenance personnel performing overhauls on the TDAFW pump turbines. Specifically, while maintenance personnel received training on some of the individual components associated with a turbine, the mechanic-electrician (mechanical) training program did not require specialty task training for turbine overhauls. In addition, this was contrary to standard industry guidelines for training and qualification of maintenance personnel. The licensee entered the issue into their corrective action program and took immediate corrective actions. At the end of the inspection period the licensee continued to evaluate the causes and corrective actions to address this finding.

The finding was more than minor because, if left uncorrected, the issue would have become a more significant safety concern. In addition, it affected the Mitigating Systems attributes of equipment performance availability and reliability, and to pre-event human error, as well as the Mitigating Systems cornerstone objective of ensuring the reliability of systems. The inspectors determined this programmatic finding was not a design qualification deficiency resulting in a loss of function per Generic Letter 91-18, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk-significant due to a seismic, fire, flooding, or severe weather initiating event. Therefore, the finding was considered to be of very low safety significance (Green). The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee failed to assure that training of personnel was adequate to assure nuclear safety (H.2(b)).

Inspection Report# : [2007008](#) (*pdf*)

G**Significance:** Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to have Procedures Appropriate to the Circumstances for the Analysis and Sampling of Safety-Related Turbine and Pump Oil

The inspectors identified a finding of very low safety significance (Green) and a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to adequately implement an oil analysis program for the TDAFW pump. The inspectors identified that the licensee failed to implement sampling guidelines using industry standards or provide an adequate justification for not performing the samples at reasonable intervals. The licensee entered the issue into their corrective action program and took immediate corrective actions. At the end of the inspection period the licensee continued to evaluate the causes and corrective actions to address this finding.

The finding was more than minor because if left uncorrected, the failure to have an adequate procedure for lubrication could result in the TDAFW pump being degraded without the knowledge of the licensee. The inspectors determined the finding did not result in an actual loss of safety function of a system or train of equipment; therefore, the finding was considered to be of very low safety significance (Green). The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee did not ensure that procedures were adequate and accurate to assure nuclear safety (H.2(c)).

Inspection Report# : [2007008](#) (*pdf*)**G****Significance:** Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement a Quarantining Process

The inspectors identified a finding of very low safety significance (Green) and a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to adequately quarantine a component for subsequent causal analysis. The inspectors identified that the licensee failed to implement procedural controls to quarantine degraded components during troubleshooting and maintenance activities which resulted in the loss of evidence for causal analysis. The licensee entered the issue into their corrective action program, implemented interim quarantine controls, and issued a new Procedure, NP 1.1.17 "Quarantine of Areas, Equipment, and Records."

The finding was more than minor because if left uncorrected, the failure to properly quarantine items could become a more significant safety concern, since the failure to do so could impede the identification of causes for conditions adverse to quality and prevent the implementation of appropriate corrective actions. The inspectors determined the finding was not a design qualification deficiency resulting in a loss of function per Generic Letter 91-18, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk-significant due to a seismic, fire, flooding, or severe weather initiating event. Therefore, the finding was considered to be of very low safety significance (Green). The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee did not ensure that procedures were adequate and accurate to assure nuclear safety (H.2(c)).

Inspection Report# : [2007008](#) (*pdf*)**G****Significance:** Dec 15, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedure for Identifying Degraded Piping

The inspectors identified a finding of very low safety significance involving areas of service water piping where microbiologically induced corrosion was identified but the wall thicknesses of the pipe in those areas were not measured. An NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," was associated with this finding for failure to prescribe directions to ensure all areas of degradation identified were characterized. The licensee performed radiographic examination of safety-related piping in the service water system to identify and determine the extent of degradation and to take appropriate corrective action to maintain operability. However, the radiographic technique used did not provide information on the most severe (deepest) degradation in the section of pipe examined. Without this information, the licensee's evaluation of the piping integrity, actions to

perform inspections of additional pipe segments, and actions to perform more frequent inspection on the same section could be inappropriate. The licensee entered this finding into its corrective action program for evaluation.

This finding is greater than minor because it was associated with the procedure quality attribute of the Mitigating System cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the procedure did not require adequate characterization of the extent of microbiologically induced corrosion (MIC) in service water (SW) piping to ensure that MIC degradation would not result in failure of the SW piping pressure boundary. Because there were no active through-wall leaks in this system and no known degradation which exceeded the Code minimum wall thickness, the finding is of very low safety significance.

Inspection Report# : [2006015](#) (*pdf*)

Significance:  Dec 15, 2006

Identified By: NRC

Item Type: FIN Finding

Inadequate Extent-of-Condition Review

The inspectors identified a finding of very low safety significance with no associated violation for an inadequate extent-of-condition review for boric acid leakage found in the last quarter of 2005 on the safety injection-850 valves (containment recirculation sump isolation valves). During the current inspection, the inspectors identified boric acid leakage on other valves that the licensee had not evaluated. The licensee entered this finding into its corrective action program.

This finding is greater than minor because failing to evaluate boric acid leakage would lead to component failure and had the potential to become a more significant safety concern. Because no safety function was lost, no Technical Specification train or maintenance rule safety function was lost, and there was no external event concerns. The finding is of very low safety significance. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of PI&R within the component of the corrective action program and the aspect of thorough evaluation of problems.

Inspection Report# : [2006015](#) (*pdf*)

Significance:  Sep 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Emergency Core Cooling System Sump Flow Design Control Deficiencies

The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance when the licensee did not correctly interpret the results of calculations of the head available to drive flow across the emergency core cooling system (ECCS) sump screens and also did not identify and did not analyze for a postulated sump plugging condition as it affected net positive suction head (NPSH) for the residual heat removal (RHR) pumps. As a result, the licensee failed to maintain design margins for ECCS sump flow. The licensee completed a causal evaluation and developed corrective actions, including the implementation of compensatory measures to ensure sump outlet flow was limited to eliminate flashing and to ensure that adequate NPSH was available.

The inspectors concluded the finding is greater than minor because it was associated with the design control attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). This design control deficiency was confirmed not to result in loss of operability per "Part 9900, Technical Guidance, Operability Determination Process for Operability and Functional Assessment." Hence, the finding screened as of very low risk significance. The inspectors also determined that a primary cause of this finding is related to the cross-cutting area of human performance. The lack of engineering rigor associated with review of this calculation involved the cross-cutting component of resources in that personnel, procedures, and supervisory resources were not adequate to assure nuclear safety, and the cross-cutting aspect of maintaining long-term plant safety by maintenance of design margins specified in calculations. The licensee did not maintain adequate NPSH margin or preclude air intrusion, as the ECCS sump flow parameter (RHR pump flow during phase 2 recirculation following a postulated loss of coolant accident was not appropriately limited in the emergency operating procedures.

Inspection Report# : [2006005](#) (*pdf*)

G**Significance:** Sep 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Containment Coatings Program Weaknesses

The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance when the licensee failed to assure that the limits of unqualified and degraded coatings within the containment sump zone of influence, as documented in the 1999 analyses of record, were correctly translated into specifications and plant procedures and that deviations since 1999 were appropriately controlled. Subsequently, the inspectors identified that the licensee had exceeded the design analysis limits associated with the quantities of degraded and unqualified coatings in containment. The licensee completed a causal evaluation and developed corrective actions, including the removal of degraded coatings and the revision of site procedures to include limits for degraded and unqualified coatings

The inspectors concluded the finding is greater than minor because it was associated with the design control attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). This design control deficiency was confirmed not to result in a loss of operability per "Part 9900, Technical Guidance, Operability Determination Process for Operability and Functional Assessment." Hence, the finding screened of as very low safety significance. The inspectors also determined that a primary cause of this finding is related to the cross-cutting area of human performance. The failure to appropriately maintain the amount of unqualified and degraded coatings in accordance with the analyses of record involved the cross-cutting component of resources for the failure to ensure that personnel, procedures, and supervisory resources were adequate to assure nuclear safety, and the cross-cutting aspect of maintaining long-term plant safety by maintenance of design margins specified in calculations supporting the design basis accidents.

Inspection Report# : [2006005](#) (*pdf*)**G****Significance:** Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Potential Common Mode Failure Mechanism Due to Overdutied Circuit Breakers

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance involving electrical system short circuit studies. Specifically, the inspectors identified that the licensee failed to identify or analyze the potential consequences of faults on non-seismically protected circuits, or the potential for degradation of redundant trains due to a fault on a non-safety circuit that is routed in raceways associated with both redundant trains.

The inspectors determined that the finding was more than minor because the failure to identify and analyze unacceptable consequences of overdutied circuit breakers could impact their safety function. In the evaluation, The inspectors determined that the finding screened as Green because, as an immediate corrective action for this issue, the licensee performed an operability evaluation that determined that despite the failure to properly analyze the consequences of overdutied circuit breakers, there was sufficient cable impedance to assure that loss of redundant buses due to postulated faults would not occur.

Inspection Report# : [2006006](#) (*pdf*)**G****Significance:** Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Conservative EDG Loading Calculation

The inspectors identified a finding of very low safety significance associated with a violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control." Specifically, Emergency Diesel Generator (EDG) Room exhaust fans, EDG diesel air start compressors, and additional loading caused by the EDG operating at frequencies above 60 Hertz (Hz) were not considered in the licensee's EDG loading calculation. The licensee determined that this issue was not an operability concern, because these additional loads did not cause the EDG to be overloaded during design basis accident conditions.

The issue was more than minor because the failure to identify loads that would be supplied during an accident condition could result in eventual overloading of the EDG. The finding screened as having very low significance (Green) because the inspectors answered “no” to all five questions under the Mitigating Systems Cornerstone column of the Phase 1 worksheet. After performing a calculation to support operability, it was determined that there were conservatisms and other unnecessary loads in the EDG loading calculation that served to counteract the non-conservatisms that were identified by the inspection team resulting in the EDG not exceeding any vendor load limitations

Inspection Report# : [2006006](#) (pdf)

G

Significance: Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Lack of a 4 Hour SBO Coping Duration Heat-Up Calculation for the AFP Rooms

The inspectors identified a finding of very low safety significance associated with a violation of 10 CFR 50.63, “Loss of all Alternating Current Power.” Specifically, the licensee never performed a calculation that evaluated the effects of loss of ventilation on the Auxiliary Feedwater Pump (AFP) room during a Station Blackout (SBO). The AFP rooms, which each house a turbine driven AFP (TDAFP), had not been evaluated for the heatup that would occur during the SBO 4 hour coping duration. In response to the inspector’s concerns, the licensee performed informal calculations to provide reasonable assurance that the heatup in the room during an SBO would not adversely affect the equipment.

The issue was more than minor because the licensee had not maintained a heatup calculation for the TDAFP room that assessed the effects of heatup on safe shutdown equipment as required for station blackout. The finding screened as having very low significance (Green) because the inspectors answered “no” to all five questions under the Mitigating Systems Cornerstone column of the Phase 1 worksheet.

Inspection Report# : [2006006](#) (pdf)

G

Significance: Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Condensate Storage Tank Vortexing Calculation Did Not Bound Station Blackout Scenario

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” having very low safety significance (Green) involving the useable volume in the condensate storage tank (CST). Specifically, the inspectors identified that the licensee’s calculation to show that there would not be vortexing in the CST was not bounding for the station blackout scenario, which was the basis for the CST volume stated in the Technical Specifications. The licensee’s corrective actions included verifying the CST contained a sufficient volume to prevent vortexing in support of a station blackout scenario, and initiated actions to perform a formal calculation and to established an administrative limit to increase the available margin from the Technical Specification limit.

The finding was more than minor because the failure to adequately evaluate the CST vortex limit could have led to an insufficient useable volume in the CST preventing the auxiliary feedwater system from performing its function during a station blackout scenario and could have affected the mitigating systems cornerstone objective of design control. The finding was of very low safety significance based on the results of the licensee’s analysis and screened as Green using the SDP Phase 1 screening worksheet.

Inspection Report# : [2006006](#) (pdf)

G

Significance: Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Unverified Fouling Factor Assumption for Containment Fan Coolers

The team identified a Green non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion XI, Test Control, relating to the safety-related Containment Fan Coolers (CFC) for not assuring that the fouling factor inside the tubes was not maintained above the minimum specified analytical limit to prevent boiling of Service Water inside the coolers' tubes during accident conditions. Specifically, the licensee visually inspected the coolers and did not establish a specific criterion for accepting a fouling factor not lower than the established minimum of 0.0003 ft²-hr-°F/Btu to prevent boiling inside the tubes.

This finding was greater than minor because the current method of testing the fan coolers did not demonstrate that the existing fouling was such to prevent boiling. The finding screened as Green because, as an immediate corrective action, the licensee demonstrated through an evaluation that if boiling occurred, it will occur first in the upper tubes before the condition of the water in the lower tubes will cause boiling. This would result in excess service water flow to the lower tubes such that the fan coolers could still perform their safety function.

Inspection Report# : [2006006](#) (*pdf*)

Significance:  Sep 29, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Reactor Water Storage Tank/Spent Fuel Pool Pipe Support Calculation Deficiencies

The team identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance involving a modification that upgraded the Reactor Water Storage Tank/Spent Fuel Pool recirculation loop small bore piping and the Units 1 and 2 Reactor Water Storage Tank cross connect branches from the loop to Seismic Class I piping. Specifically, the inspection team found numerous non-conservative technical errors and calculation omissions in seismic design basis analysis calculations that supported this modification. This issue was entered into the licensee's corrective action system.

The issue was more than minor because the presence of these non-conservative calculational deficiencies resulted in seismic design basis analysis calculations to be re-performed to assure that the pipe supports would function as required during the design basis seismic event. The finding screened as having very low significance (Green) because the inspectors answered "no" to all five questions under the Mitigating Systems Cornerstone column of the Phase 1 worksheet. Specifically, after re-performing the calculations for the supports that were called into question by the inspection team, the licensee was able to show that enough margin was still available to support the loads that would be seen during the design basis seismic event.

Inspection Report# : [2006006](#) (*pdf*)

Barrier Integrity

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Establish Appropriate Test conditions for Leak-Rate Testing Outside Containment

The inspectors identified a NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," for the failure to have procedures appropriate to the circumstances, which established the appropriate test conditions for primary coolant sources testing outside containment. Specifically, testing procedures, which satisfied Technical Specification 5.5.2, "Primary Coolant Sources Outside Containment," did not ensure that residual deposits of boric acid on the containment spray, high head and low head safety injection systems were removed, so that active system fluid leaks could be identified as required during the tests. The issue was entered into the licensee's corrective action program (CAP), the licensee took immediate corrective actions, and performed a causal evaluation at the end of this inspection.

The inspectors evaluated the finding using IMC 0609, "Appendix A, "Determining the Significance of Reactor Inspection Findings for At-Power Situations." The finding screened as very low safety significance (Green) because the finding did not: represent the degradation of the radiological barrier function provided for the auxiliary building; represent a degradation of the barrier function of the control room; and did not represent an actual open pathway in the physical integrity of reactor containment. The inspectors also determined that the primary cause of this finding is related to the cross-cutting area of human performance (H.2(c)). Specifically, under the component of resources, the licensee failed to ensure that procedures were adequate and accurate to assure nuclear safety.

Inspection Report# : [2007003](#) (*pdf*)

G**Significance:** Mar 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain Design Margin for Control Room Emergency Filtration Fan Thermal Overload Trips

A non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, "Design Control," having very low safety significance was self-revealed for the failure to maintain sufficient design margin for the expected running currents of the control room emergency filtration system fans to their thermal overload trip settings. This occurred due to design errors in a modification that replaced the fans in October 2006. Control Room Emergency Filtration System (CREFS) Fan W-1-B tripped on a breaker thermal overload during surveillance testing in February 2007 with low outside ambient air temperature (approximately negative 11°Fahrenheit). Licensee analyses also demonstrated that a trip of fan W-14A could have occurred for the combination of low ambient temperature and degraded grid voltage. The licensee took immediate corrective actions to replace the breaker thermal overloads with thermal overloads of a higher setting as a result of troubleshooting and evaluations performed following the trip of the W-14B fan. The issue was entered into the licensee's corrective action program and a root cause evaluation was subsequently performed.

The finding is greater than minor because it is associated with the attribute of maintaining radiological barrier functionality of the control room and affected the Barrier Integrity cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Loss of CREFS fans during a release could result in increased dose to the operators in the control room potentially affecting control room habitability. Although the finding involved a potential failure of the CREFS to provide its filtration function, the simultaneous occurrence of low outside air temperature, degraded grid voltage, and a radiological release is of very low probability. The finding for the failure to provide the correct thermal overload trip setting is a design deficiency that has a cross-cutting aspect in the area of human performance in that resources were not effective in maintaining long-term plant safety by maintenance of design margins.

Inspection Report# : [2007002](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

G**Significance:** Dec 15, 2006

Identified By: NRC

Item Type: FIN Finding

Untimely Completion of Three RCEs Involving Radiation Protection

The inspectors identified a finding of very low safety significance for the licensee's untimely completion of three root cause evaluations in the radiation protection area. The 3 evaluations were completed in 8-9 months instead of the 30 days stated in the corrective action program administrative procedure. Several due date extensions had been approved by station management early in the conduct of the evaluations and they eventually went overdue before they were completed. No violation of NRC requirements was identified. The licensee entered this finding into its corrective action program for evaluation.

The inspectors concluded that the issue of allowing the completion time for the three root cause evaluations to exceed the 30-day limit in the procedure is a finding that if left uncorrected would become a more significant safety concern, and thus, is a finding that is greater than minor. Because the finding did not involve an overexposure, a substantial potential for an overexposure, and a compromise of the ability to assess dose, it is of very low safety significance. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of human performance within the component of work control and the aspect of coordinating work activities.

Inspection Report# : [2006015](#) (*pdf*)

Public Radiation Safety



Significance: G Sep 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Conditional Release of Radioactively Contaminated Material, a Check Source Mechanism

A self-revealed finding of very low safety significance that was a non-cited violation of 10 CFR 20.1501 was identified for the licensee's failure to perform a survey prior to unconditionally releasing a radioactively contaminated Check Source Mechanism (CSM-1) from the plant. Corrective actions taken by the licensee for this finding included updating the model work orders to include radiological controls for secondary systems.

The issue is greater than minor because it was associated with the program/process attribute of the Public Radiation Safety Cornerstone and affected the cornerstone objective to ensure adequate protection of public health and safety from exposure to radioactive materials released into the public domain as a result of routine civilian nuclear reactor operation. The inspectors determined that the finding did not involve a radioactive transportation shipment, that public exposure did not exceed 0.005 rem, and there were less than five such occurrences. Consequently, the inspectors concluded that this finding was of very low safety significance.

Inspection Report# : [2006005](#) (*pdf*)

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: N/A Dec 31, 2006

Identified By: NRC

Item Type: AV Apparent Violation

NRC to Review Items in Confirmatory Order Dated January 3, 2007, for Employment Discrimination Settlement

In a letter dated January 3, 2007 (ADAMS Accession Number ML063630336), the NRC issued a Confirmatory Order to the licensee as part of a settlement agreement through the NRC's Alternative Dispute Resolution (ADR) process. The NRC investigated an alleged violation of 10 CFR 50.7, "Employee Protection," to determine whether a senior reactor operator was the subject of retaliation for raising a nuclear safety concern in the licensee's corrective action program. This issue was resolved through the NRC's ADR program and will be tracked as Apparent Violation (AV) 05000266/2006013-05; 05000301/2006013-05 pending NRC review of the licensee's completion of items specified in the Confirmatory Order.

Inspection Report# : [2006013](#) (*pdf*)

Significance: N/A Dec 15, 2006

Identified By: NRC

Item Type: FIN Finding

Biennial Problem Identification and Resolution Inspection

The team concluded that the licensee's program for the identification and resolutions of problems was functioning appropriately and had improved since the previous NRC PI&R expanded team inspection conducted in late 2005. The licensee was identifying plant problems at an appropriately low level, although, the inspectors noted that the threshold for entering wall thinning issues into the program was high relative to the level at which other issues were entered. The inspectors identified three findings in the area of prioritization and evaluation of issues: one for an inadequate procedure for inspection of service water pipe, one for an inadequate extent-of-condition review for boric acid

corrosion on valves; and one for untimely completion of three root cause evaluations. In the area of effectiveness of corrective actions, the inspectors concluded that a licensee-developed training course on engineer rigor was well developed and implemented and that corrective actions for three previous issues may need additional management attention to ensure timely completion. The licensee's use of operating experience and self-assessments and audits was found to be appropriate. From interviews conducted during this inspection, the inspectors concluded that workers at Point Beach felt free to input nuclear safety findings into the corrective action program.

Inspection Report# : [2006015](#) (*pdf*)

Last modified : August 24, 2007

Point Beach 2

3Q/2007 Plant Inspection Findings

Initiating Events

Significance:  Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Inadvertent Chemical and Volume Control System Letdown Isolation Due to Inadequate Instructions, Procedures, and Drawings

A self-revealing finding and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” was identified for the failure to have procedures appropriate to the circumstances for modifying the Unit 1 Charging Pump 1P-2B wiring as part of Modification MR 04-013*B, “CVCS [Chemical and Volume Control System] Charging Pump Variable Frequency Drives.” Specifically, instructions were not provided to prevent isolation of reactor coolant letdown flow while performing wiring modifications for the 1P-2B Charging Pump. The licensee entered the issue into their corrective action program and took immediate corrective actions. The licensee continued to evaluate the causes and corrective actions to address this finding at the end of the inspection period.

The finding is greater than minor because it is associated with the design control and procedural quality attributes of the Initiating Events Cornerstone and affected the cornerstone objectives to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Additionally, the inadequate design review process that caused this problem, if left uncorrected, would become a more significant safety concern. The finding is of very low safety significance (Green) because the letdown isolation that occurred did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. The inspectors also determined that the primary cause for this finding is related to the cross-cutting area of human performance. Specifically, under the component of resources, the licensee failed to ensure complete, accurate, and up-to-date installation workplans for modification of the 1P-2B Charging Pump wiring
Inspection Report# : [2007004](#) (*pdf*)

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Appropriate Maintenance on Air-Operated Valve Positioner Linkage

A self-revealing finding and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, “Instructions , Procedures, and Drawings,” having very low safety significance (Green), was identified for failure to have procedures appropriate to the circumstances for maintenance on air-operated valve positioners, when hardware attaching the connecting link between the Unit 1 “B” feedwater regulating valve positioner and actuator became disconnected resulting in loss of control of the valve. Specifically, there were no procedures that ensured that positioner arm hardware was properly secured. The licensee repaired valve positioners as required, performed an extent-of-condition review for similar valve positioners and is performing a root cause evaluation.

The inspectors concluded the finding is greater than minor because the finding was associated with the equipment performance attribute of the Initiating Events Cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The transient initiator contributor was a reactor trip that did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. Consequently, the finding is considered to be of very low safety significance (Green). The inspectors also determined that the primary cause of this finding is related to the cross-cutting area of human performance (H.2.(c)). Specifically, under the component of resources, the licensee failed to ensure complete, accurate, and up-to-date procedures and work packages for work on air-operated valve positioners were available.
Inspection Report# : [2007003](#) (*pdf*)

G**Significance:** Mar 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Take corrective Actions for Cold Weather Issues Prior to the Onset of Cold Weather

The inspectors identified a finding and associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," having very low safety significance (Green) for the failure to take prompt corrective actions to address a potential cold weather issue initially identified in October 2006 and again in January 2007. The failure to take prompt corrective actions led to the formation of ice on offsite power and plant equipment cable trays and cabling. The sheets of ice were also in close proximity to the Unit 2 Refueling Water Storage Tank level indicators and outlet piping. The licensee initiated condition reports and took immediate corrective actions and had planned additional corrective actions based on a causal evaluation.

The finding is greater than minor because if left uncorrected the finding would become a more significant safety concern in that the formation of ice in the facade building in this case could have affected safety-related equipment. In addition, the finding is associated with the external factors attribute of the Initiating Events cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Because the significant ice buildup in the Unit 2 facade was an external factor and transient initiator contributor, and did not contribute to both the likelihood of both a reactor trip and that mitigation equipment or functions would not be available, the finding is considered to be of very low safety significance (Green). This finding has a cross-cutting aspect in the area of problem identification and resolution because the licensee did not take appropriate corrective actions in a timely manner, commensurate with their safety significance and complexity.

Inspection Report# : [2007002](#) (*pdf*)**Significance:** SL-III Dec 31, 2006

Identified By: NRC

Item Type: VIO Violation

Failure to Update FSAR With Reactor Head Drop Analysis and Obtain NRC Approval

The inspectors identified an apparent violation for the failure of the licensee in 1983 to incorporate the results of an 1982 analysis of a postulated drop of the reactor vessel head on the vessel into the Final Safety Analysis Report (FSAR). The apparent violation is subject to the NRC's traditional enforcement process because it had the potential for impacting the NRC's ability to perform its regulatory function. After the problem was identified in early 2005, the licensee submitted a revised head drop analysis that the NRC reviewed and subsequently approved; evaluated the Unit 2 replacement vessel head against that analysis; updated its FSAR; and conducted a review to identify other instances where the FSAR may not have been updated.

This finding is considered greater than minor because the failure to update the FSAR as required by 10 CFR 50.71(e) resulted in the licensee not obtaining the necessary review and approval of the 1982 analysis, and in the removal and reinstallation of the original reactor heads from 1983 to 2004 without administrative controls similar to those established for head moves in 2005 and after. Also, the finding is associated with the design control attribute of the Initiating Events Cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown. Because findings involving 10 CFR 50.71(e) potentially affect the NRC's ability to perform its regulatory function, and reactor vessel head drop analysis issues are not suitable for Significance Determination Process analysis, this finding is being evaluated using the traditional enforcement process.

In a letter dated January 29, 2007, a Notice of Violation was issued for a Severity Level III violation of 10 CFR 50.71 (e). There is no civil penalty.

Inspection Report# : [2006011](#) (*pdf*)**G****Significance:** Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Replacement Reactor Vessel Head Design Deficiencies

The inspectors identified a non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, "Design

Control,” having very low safety significance (Green) when the licensee failed to assure from October 2002 to April 2005 that deviations in weight, a specific value used in analysis of the effects of a postulated accident, of the Unit 2 replacement reactor vessel head and head assembly upgrade package were controlled in accordance with the original design bases. One result of this failure was that the licensee’s 10 CFR 50.59 evaluation completed in February 2005 for the replacement head was inadequate. The licensee entered the finding into its corrective action program, and revised head replacement project documents and the station design bases to account for the differences between the Unit 2 replacement vessel head and the original head. In addition, the licensee completed an adequate 10 CFR 50.59 evaluation. These actions were taken prior to the actual lift of the new head that occurred in June 2005.

The inspectors concluded that the finding is greater than minor because it was associated with the design control attribute of the Initiating Events Cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown. Consultation with the Region III Senior Reactor Analysts determined that reactor vessel head drop issues were not suitable for the Significance Determination Process analysis. Therefore, this finding has been reviewed by NRC management and is determined to be a Green finding, of very low significance. The inspectors also determined that a primary cause of this finding is related to the cross-cutting area of human performance.

Inspection Report# : [2006011](#) (*pdf*)

G

Significance: Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Design Control for a Flooding Barrier During a Plant Modification

The inspectors identified a non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, “Design Control,” having very low safety significance for the failure to maintain flooding barriers after drilling holes and installing conduit from the containment facade buildings to the auxiliary building during modification MR 04-013 “Charging Pump Variable Frequency Drive (VFD) Installation.” As part of corrective actions, the licensee properly sealed the openings. The issue was entered into the corrective action program.

The finding is greater than minor because it was associated with the design control and flood hazard attributes of the Initiating Events cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. A flood in the auxiliary building could affect safety-related equipment and result in an upset of plant stability. Although the finding involved the degradation of a flooding barrier, the volume of any potential flooding was judged, based on the size of the hole, to be bounded by the existing internal flooding analysis for the auxiliary building, as well as the licensee’s probabilistic risk assessment; hence, the finding screened as very low safety significance. This finding has a cross-cutting aspect in the area of human performance because resources were not provided to ensure accurate and up-to-date work packages for implementation of the modification.

Inspection Report# : [2006013](#) (*pdf*)

G

Significance: Dec 31, 2006

Identified By: NRC

Item Type: FIN Finding

Inadequate Contractor Oversight Which Resulted in Damage to a Unit 2 Steam Generator Vent Line

A finding of very low safety significance was self-revealed on November 14, 2006, when unqualified contract crane technicians operated the Unit 2 polar crane and damaged the ‘B’ steam generator vent line with the main hook of the crane. The reactor was shutdown at the time of the event. As part of corrective actions, the licensee removed authorization for the technicians to operate the crane, ensured necessary procedural controls were implemented, and evaluated the damaged vent line. The issue was entered into the corrective action program. Subsequently, plant engineers concluded that the vent line remained operable, but degraded.

This finding is greater than minor because if left uncorrected it would become a more significant safety concern in that a significant upset of plant stability would have occurred had the crane hook damaged other, safety-related equipment. In addition, the finding is associated with the human performance attribute of the Initiating Events cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Because the transient initiator contributor was main steam vent piping damage, which did not contribute to both the likelihood of a reactor trip and

the likelihood that mitigation equipment or functions would not be available, the finding is considered to be of very low safety significance. The finding has a cross-cutting aspect in the area of human performance because the licensee's work practices failed to ensure adequate supervisory and management oversight of contractor work activities.

Inspection Report# : [2006013](#) (*pdf*)

Significance:  Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedural Controls for Manually Operated Breakers Located in Certain Control Panels

A finding and associated non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," having very low safety significance was self-revealed on October 16, 2006, during the out-of-service tagging of a manually operated breaker (MOB) in the Unit 2 control panel. The reactor was shutdown at the time of the event but at normal operating pressure and temperature. During the tagging, an adjacent breaker was inadvertently repositioned resulting in the opening of the pressurizer power-operated relief valve (PORV). About 63 gallons of reactor coolant were released through the valve to the pressurizer relief tank before operators repositioned the breaker and the valve re-closed. The released was categorized as a Notification of Unusual Event. The mispositioning was caused by a lack of adequate procedural controls for working in the control panels and a lack of knowledge by personnel as to the minimal force required to open the MOBs. As part of corrective actions, the licensee replaced or protected the most risk significant MOBs, trained workers on the operating sensitivity of the breakers, and established controls governing work in the control panels around sensitive equipment. The issue was entered into the corrective action program and the licensee performed a root cause evaluation for this event.

This finding is greater than minor because if left uncorrected it would become a more significant safety concern in that the inadvertent re-positioning of other similar breakers in the main control room control panels would significantly upset plant stability. In addition, the finding is associated with the procedure quality and human performance attribute of the Initiating Events cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Because attributes such as core heat removal, inventory control, power availability, containment control, and reactivity guidelines were met, the finding screened as (Green) having very low safety significance. The finding has a cross-cutting aspect in the area of human performance because the licensee's control of work failed to incorporate into planned work activities job site conditions, including environmental conditions which may impact human performance, and the human-system interface, that is, the operator interface with the breakers in the close confines of the control panels.

Inspection Report# : [2006013](#) (*pdf*)

Mitigating Systems

Significance:  Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Service Water System Microbiologically-Induced Corrosion through-Wall Leak Due to Inadequate Corrective Actions

A self-revealing finding and associated NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified for the failure to take prompt corrective action for microbiologically-induced corrosion (MIC) of the service water (SW) piping. Specifically, the SW Inservice Inspection Program failed to identify SW pipe thinning prior to MIC causing a through-wall leak because the non-destructive examination method used, specifically radiography, was inadequate for detecting MIC. The limited ability for identifying MIC with radiography was a known problem and was previously documented in the licensee's corrective action program in 2005; however, prompt corrective actions were not taken. For the 2007 leak, the licensee took immediate corrective actions to replace the leaking SW pipe and proposed changes to the SW Inservice Inspection Program that would enhance the site's ability to identify potential sources of MIC in the SW system and correct the program issues initially identified in 2005.

The issue is greater than minor because it is associated with the equipment performance attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. In addition, if left uncorrected, the finding would become a more significant safety concern. The finding is of very low safety significance (Green) because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the Technical Specification (TS) allowed outage time, and no risk due to external events. Additionally, the inspectors determined that the primary cause of the finding is related to the cross-cutting area of problem identification and resolution. Specifically, under the component of corrective action program, the licensee failed to take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance and complexity
Inspection Report# : [2007004](#) (*pdf*)

G

Significance: Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Correct Previous Indication of Degraded Oil in Component Cooling Water Pump

The inspectors identified an NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to implement prompt corrective actions for the degraded oil conditions initially identified with safety-related Component Cooling Water (CCW) Pump 1P-11B in March 2007. Following an additional oil sample with anomalous results in July 2007, the licensee declared the pump inoperable and performed troubleshooting and repair of CCW Pump 1P-11B. The licensee entered the issue into their corrective action program and took immediate corrective actions. The licensee continued to evaluate the causes and corrective actions to address this finding at the end of the inspection period.

The finding is greater than minor because it could reasonably be viewed as a precursor to a significant event. Specifically, the failure to promptly correct the cause of the oil degradation in a timely manner in March 2007 could have resulted in the failure of the CCW pump. Additionally, the finding is associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance (Green) because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the TS allowed outage time, and no risk due to external events. Additionally, the inspectors determined that the primary cause of the finding is related to the cross-cutting area of problem identification and resolution. Specifically, under the component of corrective action program, the licensee failed to take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance and complexity
Inspection Report# : [2007004](#) (*pdf*)

G

Significance: Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Incorrect Calibration Methods for Engineered Safeguards Actuation System Instrumentation, Lead/Lag Time Constants for Steam Line Pressure

A self-revealing finding and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for the failure to have adequate maintenance procedures for performing calibration of the Engineered Safeguards Feature Actuation System (ESFAS) instrumentation steam pressure compensator modules. Specifically, instructions were not correct or sufficiently detailed to determine mathematical values from graphical displays of circuit output used in performing the subject calibrations.

The finding is greater than minor because it is associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the TS allowed outage time, and no risk due to external events. The inspectors also determined that the primary cause of this finding is related to the cross-cutting area of human performance. Specifically, under the component of resources, the licensee failed to ensure complete, accurate and up-to-date procedures for calibration of the ESFAS instrumentation steam pressure compensator modules

Inspection Report# : [2007004](#) (*pdf*)

Significance:  Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Account for MOV Stalling Delays for ECCS Response Time Analysis

Inspection Report# : [2007004](#) (*pdf*)

Significance:  Jul 13, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Promptly Correct Non-Compliant Sprinkler Heads in the EDG Rooms

The inspectors identified a finding of very low safety significance and an associated NCV of the PBNP's Operating License for failure to take prompt corrective action for a condition adverse to quality. Specifically, in July 2002, the licensee identified that four sprinkler heads located in Fire Zones 308 and 309 (i.e., emergency diesel generator (EDG) rooms G-01 and G-02, respectively) were not in compliance with the NFPA 13-1966 Code, Section 3066. The violation was entered into the licensee's CAP as 01101421, "Untimely Corrective Actions," dated July 12, 2007, to increase the priority of the modification that was to correct the sprinkler heads' non-compliant condition. The finding has a cross-cutting aspect in the area of problem identification and resolution because the licensee did not take appropriate corrective action to address the safety issue in a timely manner commensurate with its safety significance and complexity.

This finding was more than minor because the finding was associated with the protection against external factors (i.e., fire) attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the licensee's failure to promptly correct the lack of return bends condition for four sprinkler heads in the EDG rooms and take appropriate action to restore the operability of these sprinkler heads in a timely manner could have affected the suppression capability of the fire suppression systems in these rooms. The finding was of very low safety significance based on a Phase 2, SDP evaluation completed in accordance with IMC 0609, Appendix F, "Fire Protection Significance Determination Process." (Section 1R05.4b)

Inspection Report# : [2007006](#) (*pdf*)

Significance: N/A Jul 13, 2007

Identified By: NRC

Item Type: FIN Finding

Failure to Meet Separation Requirements for Redundant Trains

The inspectors identified a violation of 10 CFR Part 50, Appendix R, Section III.G.2, involving the licensee's failure to ensure, in the event of a severe fire, that one redundant train of systems necessary to achieve and maintain hot shutdown (HSD) conditions was free of fire damage. Specifically, in the event of a severe fire in Fire Zone 151 in Fire Area A02, the licensee failed to ensure that cables and/or circuits of one redundant train of charging pumps were adequately protected by a 20-foot separation with no intervening combustibles. The violation was entered into the licensee's corrective action program (CAP) as 01101444, "Compliance with Appendix R, Section III.G.2 in Fire Zone 151," dated July 12, 2007. The licensee initiated compensatory measures and will evaluate the violation during transition to NFPA 805. The inspectors determined there was no cross-cutting aspect to this finding.

This finding was more than minor because the finding was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the licensee's failure to ensure that cables and/or circuits of one redundant train of charging pumps were adequately protected, by maintaining a 20-foot separation with no intervening combustibles, left the charging pumps' cables and/or circuits vulnerable to fire damage and did not ensure the availability and reliability of systems that respond to initiating events. Because the NRC-identified violation was a circuit-related finding that was not associated with a finding of high safety significance (Red), the inspectors evaluated the violation in accordance with the four criteria established by Section A of the NRC's Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues (10 CFR Part 50.48) for a licensee in NFPA 805 transition. The inspectors determined

that for this violation: (1) the licensee would have identified the violation during the scheduled transition to 10 CFR Part 50, Section 48(c); (2) the licensee had established adequate compensatory measures within a reasonable time frame following identification and would correct the violation as a result of completing the NFPA 805 transition; (3) the violation was not likely to have been previously identified by routine licensee efforts; and (4) the violation was not willful. As a result, the inspectors concluded that the violation met all four criteria established by Section A, and the NRC is exercising enforcement discretion to not cite this violation in accordance with the NRC's Enforcement Policy. (Section 1R05.2b.1)

Inspection Report# : [2007006](#) (*pdf*)

G

Significance: Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement Work Instructions for Preventive Maintenance on Safety-Related Battery Chargers

The inspectors identified a NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for failure to accomplish required preventive maintenance resulting in the D-108 Station Battery output becoming unstable on several occasions. In January 2007, the D-09 Battery Charger also failed as a result of failure to perform scheduled preventive maintenance. The licensee initiated condition reports, took immediate corrective actions to repair the chargers and is performing an apparent cause evaluation.

The inspectors concluded that the finding is greater than minor because if left uncorrected, the finding would become a more significant safety concern, in that, failures of safety-related battery chargers can significantly challenge the vital 125V DC system. In addition, the finding is associated with the equipment performance attribute of the Mitigating System cornerstone and affects the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences, (such as, core damage). Since the finding is not a loss of system safety function and is not an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time, the finding is considered to be of very low safety significance (Green). The inspectors also determined that the primary cause of this finding is related to the cross-cutting area of human performance (H.3(b)). Specifically, the licensee did not appropriately coordinate work activities to support long-term equipment reliability and maintenance scheduling, which was not more preventive than reactive, as critical preventative maintenance for battery chargers was not performed.

Inspection Report# : [2007003](#) (*pdf*)

G

Significance: Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Program for Preventive Maintenance of Breaker Mechanism Operated Control Switches

The inspectors identified a NCV of 10 CFR Part 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," of very low safety significance (Green), for the failure to incorporate available internal and external Operating Experience (OE) pertaining to 4.16kV switchgear cubicle Mechanism Operated Control (MOC) switch assemblies. Preventive maintenance procedures for Westinghouse 4.16kV switchgear cubicles had not been revised to incorporate important MOC switch linkage measurements, adjustments and verification of contact position. The licensee initiated condition reports and is revising procedures to incorporate required preventive maintenance.

The inspectors concluded that the finding is greater than minor, because, if left uncorrected, the finding would become a more significant safety concern. The finding also affects the procedure quality attribute of the Mitigating System cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (such as, core damage). Since the finding is not a loss of system safety function and is not an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time, the finding is considered to be of very low safety significance (Green). Additionally, the inspectors determined that the contributing cause of the finding is related to the cross-cutting area of Problem Identification and Resolution within the component of OE (P.2(b)). The licensee did not implement and institutionalize OE through changes to station processes and procedures, as appropriate preventive maintenance procedures and routines were not established.

Inspection Report# : [2007003](#) (*pdf*)

G**Significance:** Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to have Procedures Appropriate to the Circumstances for Terry Turbine Overhauls

The inspectors identified a finding of very low safety significance and a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to ensure that procedures associated with the maintenance of the TDAFW turbines were appropriate to the circumstances. Specifically, the licensee's maintenance overhaul procedure did not address the following significant issues: 1) specify acceptance criteria and as-left requirements for thrust bearing axial clearance; 2) specify instructions to ensure the proper setting and critical dimensions for the proper pump to turbine coupling stretch; 3) correctly establish the turbine to wheel nozzle lap setting; and 4) specify proper placement of insulation on the turbine. The licensee entered the issue into their corrective action program and took immediate corrective actions. At the end of the inspection period the licensee continued to evaluate the causes and corrective actions to address this finding.

The finding was more than minor because, if left uncorrected, the issue would have become a more significant safety concern. In addition, it affected the Mitigating Systems attributes of equipment performance availability and reliability, and maintenance procedure quality, as well as the Mitigating Systems cornerstone objective of ensuring the reliability of systems. The inspectors determined this programmatic finding was not a design qualification deficiency resulting in a loss of function per Generic Letter 91-18, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk-significant due to a seismic, fire, flooding, or severe weather initiating event. Therefore, the finding was considered to be of very low safety significance (Green). The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee failed to ensure that procedures were adequate and accurate to assure nuclear safety (H.2(c)).

Inspection Report# : [2007008](#) (*pdf*)**G****Significance:** Jun 30, 2007

Identified By: NRC

Item Type: FIN Finding

Failure to have Specific Formal Training for Maintenance Craft on Terry Turbine Overhauls

The inspectors identified a finding of very low significance (Green) with no associated violation for the failure to provide appropriate training for maintenance personnel performing overhauls on the TDAFW pump turbines. Specifically, while maintenance personnel received training on some of the individual components associated with a turbine, the mechanic-electrician (mechanical) training program did not require specialty task training for turbine overhauls. In addition, this was contrary to standard industry guidelines for training and qualification of maintenance personnel. The licensee entered the issue into their corrective action program and took immediate corrective actions. At the end of the inspection period the licensee continued to evaluate the causes and corrective actions to address this finding.

The finding was more than minor because, if left uncorrected, the issue would have become a more significant safety concern. In addition, it affected the Mitigating Systems attributes of equipment performance availability and reliability, and to pre-event human error, as well as the Mitigating Systems cornerstone objective of ensuring the reliability of systems. The inspectors determined this programmatic finding was not a design qualification deficiency resulting in a loss of function per Generic Letter 91-18, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk-significant due to a seismic, fire, flooding, or severe weather initiating event. Therefore, the finding was considered to be of very low safety significance (Green). The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee failed to assure that training of personnel was adequate to assure nuclear safety (H.2(b)).

Inspection Report# : [2007008](#) (*pdf*)**G****Significance:** Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to have Procedures Appropriate to the Circumstances for the Analysis and Sampling of Safety-Related Turbine and Pump Oil

The inspectors identified a finding of very low safety significance (Green) and a non-cited violation of 10 CFR 50,

Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to adequately implement an oil analysis program for the TDAFW pump. The inspectors identified that the licensee failed to implement sampling guidelines using industry standards or provide an adequate justification for not performing the samples at reasonable intervals. The licensee entered the issue into their corrective action program and took immediate corrective actions. At the end of the inspection period the licensee continued to evaluate the causes and corrective actions to address this finding.

The finding was more than minor because if left uncorrected, the failure to have an adequate procedure for lubrication could result in the TDAFW pump being degraded without the knowledge of the licensee. The inspectors determined the finding did not result in an actual loss of safety function of a system or train of equipment; therefore, the finding was considered to be of very low safety significance (Green). The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee did not ensure that procedures were adequate and accurate to assure nuclear safety (H.2(c)).

Inspection Report# : [2007008](#) (*pdf*)

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement a Quarantining Process

The inspectors identified a finding of very low safety significance (Green) and a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to adequately quarantine a component for subsequent causal analysis. The inspectors identified that the licensee failed to implement procedural controls to quarantine degraded components during troubleshooting and maintenance activities which resulted in the loss of evidence for causal analysis. The licensee entered the issue into their corrective action program, implemented interim quarantine controls, and issued a new Procedure, NP 1.1.17 "Quarantine of Areas, Equipment, and Records."

The finding was more than minor because if left uncorrected, the failure to properly quarantine items could become a more significant safety concern, since the failure to do so could impede the identification of causes for conditions adverse to quality and prevent the implementation of appropriate corrective actions. The inspectors determined the finding was not a design qualification deficiency resulting in a loss of function per Generic Letter 91-18, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk-significant due to a seismic, fire, flooding, or severe weather initiating event. Therefore, the finding was considered to be of very low safety significance (Green). The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee did not ensure that procedures were adequate and accurate to assure nuclear safety (H.2(c)).

Inspection Report# : [2007008](#) (*pdf*)

Significance:  Dec 15, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedure for Identifying Degraded Piping

The inspectors identified a finding of very low safety significance involving areas of service water piping where microbiologically induced corrosion was identified but the wall thicknesses of the pipe in those areas were not measured. An NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," was associated with this finding for failure to prescribe directions to ensure all areas of degradation identified were characterized. The licensee performed radiographic examination of safety-related piping in the service water system to identify and determine the extent of degradation and to take appropriate corrective action to maintain operability. However, the radiographic technique used did not provide information on the most severe (deepest) degradation in the section of pipe examined. Without this information, the licensee's evaluation of the piping integrity, actions to perform inspections of additional pipe segments, and actions to perform more frequent inspection on the same section could be inappropriate. The licensee entered this finding into its corrective action program for evaluation.

This finding is greater than minor because it was associated with the procedure quality attribute of the Mitigating System cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the procedure did not require adequate characterization of the extent of microbiologically induced corrosion (MIC) in

service water (SW) piping to ensure that MIC degradation would not result in failure of the SW piping pressure boundary. Because there were no active through-wall leaks in this system and no known degradation which exceeded the Code minimum wall thickness, the finding is of very low safety significance.

Inspection Report# : [2006015](#) (*pdf*)

Significance:  Dec 15, 2006

Identified By: NRC

Item Type: FIN Finding

Inadequate Extent-of-Condition Review

The inspectors identified a finding of very low safety significance with no associated violation for an inadequate extent-of-condition review for boric acid leakage found in the last quarter of 2005 on the safety injection-850 valves (containment recirculation sump isolation valves). During the current inspection, the inspectors identified boric acid leakage on other valves that the licensee had not evaluated. The licensee entered this finding into its corrective action program.

This finding is greater than minor because failing to evaluate boric acid leakage would lead to component failure and had the potential to become a more significant safety concern. Because no safety function was lost, no Technical Specification train or maintenance rule safety function was lost, and there was no external event concerns. The finding is of very low safety significance. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of PI&R within the component of the corrective action program and the aspect of thorough evaluation of problems.

Inspection Report# : [2006015](#) (*pdf*)

Barrier Integrity

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Establish Appropriate Test conditions for Leak-Rate Testing Outside Containment

The inspectors identified a NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," for the failure to have procedures appropriate to the circumstances, which established the appropriate test conditions for primary coolant sources testing outside containment. Specifically, testing procedures, which satisfied Technical Specification 5.5.2, "Primary Coolant Sources Outside Containment," did not ensure that residual deposits of boric acid on the containment spray, high head and low head safety injection systems were removed, so that active system fluid leaks could be identified as required during the tests. The issue was entered into the licensee's corrective action program (CAP), the licensee took immediate corrective actions, and performed a causal evaluation at the end of this inspection.

The inspectors evaluated the finding using IMC 0609, "Appendix A, "Determining the Significance of Reactor Inspection Findings for At-Power Situations." The finding screened as very low safety significance (Green) because the finding did not: represent the degradation of the radiological barrier function provided for the auxiliary building; represent a degradation of the barrier function of the control room; and did not represent an actual open pathway in the physical integrity of reactor containment. The inspectors also determined that the primary cause of this finding is related to the cross-cutting area of human performance (H.2(c)). Specifically, under the component of resources, the licensee failed to ensure that procedures were adequate and accurate to assure nuclear safety.

Inspection Report# : [2007003](#) (*pdf*)

Significance:  Mar 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain Design Margin for Control Room Emergency Filtration Fan Thermal Overload Trips

A non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, "Design Control," having very low safety

significance was self-revealed for the failure to maintain sufficient design margin for the expected running currents of the control room emergency filtration system fans to their thermal overload trip settings. This occurred due to design errors in a modification that replaced the fans in October 2006. Control Room Emergency Filtration System (CREFS) Fan W-1-B tripped on a breaker thermal overload during surveillance testing in February 2007 with low outside ambient air temperature (approximately negative 11°Fahrenheit). Licensee analyses also demonstrated that a trip of fan W-14A could have occurred for the combination of low ambient temperature and degraded grid voltage. The licensee took immediate corrective actions to replace the breaker thermal overloads with thermal overloads of a higher setting as a result of troubleshooting and evaluations performed following the trip of the W-14B fan. The issue was entered into the licensee's corrective action program and a root cause evaluation was subsequently performed.

The finding is greater than minor because it is associated with the attribute of maintaining radiological barrier functionality of the control room and affected the Barrier Integrity cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Loss of CREFS fans during a release could result in increased dose to the operators in the control room potentially affecting control room habitability. Although the finding involved a potential failure of the CREFS to provide its filtration function, the simultaneous occurrence of low outside air temperature, degraded grid voltage, and a radiological release is of very low probability. The finding for the failure to provide the correct thermal overload trip setting is a design deficiency that has a cross-cutting aspect in the area of human performance in that resources were not effective in maintaining long-term plant safety by maintenance of design margins.
Inspection Report# : [2007002](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Significance:  Dec 15, 2006

Identified By: NRC

Item Type: FIN Finding

Untimely Completion of Three RCEs Involving Radiation Protection

The inspectors identified a finding of very low safety significance for the licensee's untimely completion of three root cause evaluations in the radiation protection area. The 3 evaluations were completed in 8-9 months instead of the 30 days stated in the corrective action program administrative procedure. Several due date extensions had been approved by station management early in the conduct of the evaluations and they eventually went overdue before they were completed. No violation of NRC requirements was identified. The licensee entered this finding into its corrective action program for evaluation.

The inspectors concluded that the issue of allowing the completion time for the three root cause evaluations to exceed the 30-day limit in the procedure is a finding that if left uncorrected would become a more significant safety concern, and thus, is a finding that is greater than minor. Because the finding did not involve an overexposure, a substantial potential for an overexposure, and a compromise of the ability to assess dose, it is of very low safety significance. The inspectors also determined that a primary cause of this finding was related to the cross-cutting area of human performance within the component of work control and the aspect of coordinating work activities.

Inspection Report# : [2006015](#) (*pdf*)

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: N/A Dec 31, 2006

Identified By: NRC

Item Type: AV Apparent Violation

NRC to Review Items in Confirmatory Order Dated January 3, 2007, for Employment Discrimination

Settlement

In a letter dated January 3, 2007 (ADAMS Accession Number ML063630336), the NRC issued a Confirmatory Order to the licensee as part of a settlement agreement through the NRC's Alternative Dispute Resolution (ADR) process. The NRC investigated an alleged violation of 10 CFR 50.7, "Employee Protection," to determine whether a senior reactor operator was the subject of retaliation for raising a nuclear safety concern in the licensee's corrective action program. This issue was resolved through the NRC's ADR program and will be tracked as Apparent Violation (AV) 05000266/2006013-05; 05000301/2006013-05 pending NRC review of the licensee's completion of items specified in the Confirmatory Order.

Inspection Report# : [2006013](#) (*pdf*)

Significance: N/A Dec 15, 2006

Identified By: NRC

Item Type: FIN Finding

Biennial Problem Identification and Resolution Inspection

The team concluded that the licensee's program for the identification and resolutions of problems was functioning appropriately and had improved since the previous NRC PI&R expanded team inspection conducted in late 2005. The licensee was identifying plant problems at an appropriately low level, although, the inspectors noted that the threshold for entering wall thinning issues into the program was high relative to the level at which other issues were entered. The inspectors identified three findings in the area of prioritization and evaluation of issues: one for an inadequate procedure for inspection of service water pipe, one for an inadequate extent-of-condition review for boric acid corrosion on valves; and one for untimely completion of three root cause evaluations. In the area of effectiveness of corrective actions, the inspectors concluded that a licensee-developed training course on engineer rigor was well developed and implemented and that corrective actions for three previous issues may need additional management attention to ensure timely completion. The licensee's use of operating experience and self-assessments and audits was found to be appropriate. From interviews conducted during this inspection, the inspectors concluded that workers at Point Beach felt free to input nuclear safety findings into the corrective action program.

Inspection Report# : [2006015](#) (*pdf*)

Last modified : December 07, 2007

Point Beach 2

4Q/2007 Plant Inspection Findings

Initiating Events

Significance:  Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Inadvertent Chemical and Volume Control System Letdown Isolation Due to Inadequate Instructions, Procedures, and Drawings

A self-revealing finding and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” was identified for the failure to have procedures appropriate to the circumstances for modifying the Unit 1 Charging Pump 1P-2B wiring as part of Modification MR 04-013*B, “CVCS [Chemical and Volume Control System] Charging Pump Variable Frequency Drives.” Specifically, instructions were not provided to prevent isolation of reactor coolant letdown flow while performing wiring modifications for the 1P-2B Charging Pump. The licensee entered the issue into their corrective action program and took immediate corrective actions. The licensee continued to evaluate the causes and corrective actions to address this finding at the end of the inspection period.

The finding is greater than minor because it is associated with the design control and procedural quality attributes of the Initiating Events Cornerstone and affected the cornerstone objectives to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Additionally, the inadequate design review process that caused this problem, if left uncorrected, would become a more significant safety concern. The finding is of very low safety significance (Green) because the letdown isolation that occurred did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. The inspectors also determined that the primary cause for this finding is related to the cross-cutting area of human performance. Specifically, under the component of resources, the licensee failed to ensure complete, accurate, and up-to-date installation workplans for modification of the 1P-2B Charging Pump wiring
Inspection Report# : [2007004](#) (*pdf*)

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Appropriate Maintenance on Air-Operated Valve Positioner Linkage

A self-revealing finding and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, “Instructions , Procedures, and Drawings,” having very low safety significance (Green), was identified for failure to have procedures appropriate to the circumstances for maintenance on air-operated valve positioners, when hardware attaching the connecting link between the Unit 1 “B” feedwater regulating valve positioner and actuator became disconnected resulting in loss of control of the valve. Specifically, there were no procedures that ensured that positioner arm hardware was properly secured. The licensee repaired valve positioners as required, performed an extent-of-condition review for similar valve positioners and is performing a root cause evaluation.

The inspectors concluded the finding is greater than minor because the finding was associated with the equipment performance attribute of the Initiating Events Cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The transient initiator contributor was a reactor trip that did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. Consequently, the finding is considered to be of very low safety significance (Green). The inspectors also determined that the primary cause of this finding is related to the cross-cutting area of human performance (H.2.(c)). Specifically, under the component of resources, the licensee failed to ensure complete, accurate, and up-to-date procedures and work packages for work on air-operated valve positioners were available.
Inspection Report# : [2007003](#) (*pdf*)

Significance: Mar 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Take corrective Actions for Cold Weather Issues Prior to the Onset of Cold Weather

The inspectors identified a finding and associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," having very low safety significance (Green) for the failure to take prompt corrective actions to address a potential cold weather issue initially identified in October 2006 and again in January 2007. The failure to take prompt corrective actions led to the formation of ice on offsite power and plant equipment cable trays and cabling. The sheets of ice were also in close proximity to the Unit 2 Refueling Water Storage Tank level indicators and outlet piping. The licensee initiated condition reports and took immediate corrective actions and had planned additional corrective actions based on a causal evaluation.

The finding is greater than minor because if left uncorrected the finding would become a more significant safety concern in that the formation of ice in the facade building in this case could have affected safety-related equipment. In addition, the finding is associated with the external factors attribute of the Initiating Events cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Because the significant ice buildup in the Unit 2 facade was an external factor and transient initiator contributor, and did not contribute to both the likelihood of both a reactor trip and that mitigation equipment or functions would not be available, the finding is considered to be of very low safety significance (Green). This finding has a cross-cutting aspect in the area of problem identification and resolution because the licensee did not take appropriate corrective actions in a timely manner, commensurate with their safety significance and complexity.

Inspection Report# : [2007002](#) (*pdf*)

Significance: SL-III Dec 31, 2006

Identified By: NRC

Item Type: VIO Violation

Failure to Update FSAR With Reactor Head Drop Analysis and Obtain NRC Approval

The inspectors identified an apparent violation for the failure of the licensee in 1983 to incorporate the results of an 1982 analysis of a postulated drop of the reactor vessel head on the vessel into the Final Safety Analysis Report (FSAR). The apparent violation is subject to the NRC's traditional enforcement process because it had the potential for impacting the NRC's ability to perform its regulatory function. After the problem was identified in early 2005, the licensee submitted a revised head drop analysis that the NRC reviewed and subsequently approved; evaluated the Unit 2 replacement vessel head against that analysis; updated its FSAR; and conducted a review to identify other instances where the FSAR may not have been updated.

This finding is considered greater than minor because the failure to update the FSAR as required by 10 CFR 50.71(e) resulted in the licensee not obtaining the necessary review and approval of the 1982 analysis, and in the removal and reinstallation of the original reactor heads from 1983 to 2004 without administrative controls similar to those established for head moves in 2005 and after. Also, the finding is associated with the design control attribute of the Initiating Events Cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown. Because findings involving 10 CFR 50.71(e) potentially affect the NRC's ability to perform its regulatory function, and reactor vessel head drop analysis issues are not suitable for Significance Determination Process analysis, this finding is being evaluated using the traditional enforcement process.

In a letter dated January 29, 2007, a Notice of Violation was issued for a Severity Level III violation of 10 CFR 50.71 (e). There is no civil penalty.

Inspection Report# : [2006011](#) (*pdf*)

G**Significance:** Dec 14, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Incorrect Factor of Safety Specified in Design Evaluation of Unit 1 SGBD HX Platform

The inspectors identified an NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," that was of very low safety significance involving a calculation that designed the Unit 1 Steam Generator Blowdown (SGBD) Heat Exchanger (HX) Platform to withstand a load from a postulated pipe whip of the condensate return line resulting from a High-Energy Line Break (HELB). The load from a postulated pipe whip applied to the platform was evaluated in calculation PBNP-994-10-S01, "SGBD HX Platform Mod. For Addition of Pipe Rupture Restraint for Condensate Return Line" which was approved on April 28, 2007. As a result of this calculation, the design function of the Unit 1 SGBD HX Platform was revised to hold and maintain the steam generator blowdown heat exchangers and condensate return line in position and assure that the platform did not fall onto the safety related Refueling Water Storage Tank (RWST) during a safe shutdown earthquake and a HELB simultaneously. Specifically, the licensee failed to correctly use the original design anchor bolt safety factor in the supporting calculation. This issue was entered into the licensee's corrective action program as condition report CAP 1118144.

The issue was more than minor because the calculation error would be expected to necessitate extensive calculation rework and possibly a modification in order to demonstrate that the platform meets design acceptance limits commensurate with those applied to original design. The finding screened as having very low safety significance (Green) because the inspectors answered "yes" to question 1 under the Mitigating Systems Cornerstone column of the Phase 1 worksheet. Specifically, the platform remained "operable but degraded". The cause of the finding was related to the cross-cutting element in Human Performance, Work Practices because the licensee did not ensure supervisory and management oversight of work activities, including contractors, such that nuclear safety is supported (item H.4(c) of IMC 0305). The licensee had failed to correctly use the original design anchor bolt safety factor in all three revisions of the design basis calculation.

Inspection Report# : [2007007](#) (*pdf*)**G****Significance:** Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Service Water System Microbiologically-Induced Corrosion through-Wall Leak Due to Inadequate Corrective Actions

A self-revealing finding and associated NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified for the failure to take prompt corrective action for microbiologically-induced corrosion (MIC) of the service water (SW) piping. Specifically, the SW Inservice Inspection Program failed to identify SW pipe thinning prior to MIC causing a through-wall leak because the non-destructive examination method used, specifically radiography, was inadequate for detecting MIC. The limited ability for identifying MIC with radiography was a known problem and was previously documented in the licensee's corrective action program in 2005; however, prompt corrective actions were not taken. For the 2007 leak, the licensee took immediate corrective actions to replace the leaking SW pipe and proposed changes to the SW Inservice Inspection Program that would enhance the site's ability to identify potential sources of MIC in the SW system and correct the program issues initially identified in 2005.

The issue is greater than minor because it is associated with the equipment performance attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. In addition, if left uncorrected, the finding would become a more significant safety concern. The finding is of very low safety significance (Green) because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the Technical Specification (TS) allowed outage time, and no risk due to external events. Additionally, the inspectors determined that the primary cause of the finding is related to the cross-cutting area of problem identification and resolution. Specifically, under the component of corrective action program, the licensee failed to take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance and complexity

Inspection Report# : [2007004](#) (*pdf*)

G**Significance:** Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Correct Previous Indication of Degraded Oil in Component Cooling Water Pump

The inspectors identified an NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to implement prompt corrective actions for the degraded oil conditions initially identified with safety-related Component Cooling Water (CCW) Pump 1P-11B in March 2007. Following an additional oil sample with anomalous results in July 2007, the licensee declared the pump inoperable and performed troubleshooting and repair of CCW Pump 1P-11B. The licensee entered the issue into their corrective action program and took immediate corrective actions. The licensee continued to evaluate the causes and corrective actions to address this finding at the end of the inspection period.

The finding is greater than minor because it could reasonably be viewed as a precursor to a significant event. Specifically, the failure to promptly correct the cause of the oil degradation in a timely manner in March 2007 could have resulted in the failure of the CCW pump. Additionally, the finding is associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance (Green) because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the TS allowed outage time, and no risk due to external events. Additionally, the inspectors determined that the primary cause of the finding is related to the cross-cutting area of problem identification and resolution. Specifically, under the component of corrective action program, the licensee failed to take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance and complexity

Inspection Report# : [2007004](#) (*pdf*)**G****Significance:** Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Incorrect Calibration Methods for Engineered Safeguards Actuation System Instrumentation, Lead/Lag Time Constants for Steam Line Pressure

A self-revealing finding and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for the failure to have adequate maintenance procedures for performing calibration of the Engineered Safeguards Feature Actuation System (ESFAS) instrumentation steam pressure compensator modules. Specifically, instructions were not correct or sufficiently detailed to determine mathematical values from graphical displays of circuit output used in performing the subject calibrations.

The finding is greater than minor because it is associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the TS allowed outage time, and no risk due to external events. The inspectors also determined that the primary cause of this finding is related to the cross-cutting area of human performance. Specifically, under the component of resources, the licensee failed to ensure complete, accurate and up-to-date procedures for calibration of the ESFAS instrumentation steam pressure compensator modules

Inspection Report# : [2007004](#) (*pdf*)**G****Significance:** Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Account for MOV Stalling Delays for ECCS Response Time AnalysisInspection Report# : [2007004](#) (*pdf*)**G****Significance:** Jul 13, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Promptly Correct Non-Compliant Sprinkler Heads in the EDG Rooms

The inspectors identified a finding of very low safety significance and an associated NCV of the PBNP's Operating License for failure to take prompt corrective action for a condition adverse to quality. Specifically, in July 2002, the licensee identified that four sprinkler heads located in Fire Zones 308 and 309 (i.e., emergency diesel generator (EDG) rooms G-01 and G-02, respectively) were not in compliance with the NFPA 13-1966 Code, Section 3066. The violation was entered into the licensee's CAP as 01101421, "Untimely Corrective Actions," dated July 12, 2007, to increase the priority of the modification that was to correct the sprinkler heads' non-compliant condition. The finding has a cross-cutting aspect in the area of problem identification and resolution because the licensee did not take appropriate corrective action to address the safety issue in a timely manner commensurate with its safety significance and complexity.

This finding was more than minor because the finding was associated with the protection against external factors (i.e., fire) attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the licensee's failure to promptly correct the lack of return bends condition for four sprinkler heads in the EDG rooms and take appropriate action to restore the operability of these sprinkler heads in a timely manner could have affected the suppression capability of the fire suppression systems in these rooms. The finding was of very low safety significance based on a Phase 2, SDP evaluation completed in accordance with IMC 0609, Appendix F, "Fire Protection Significance Determination Process." (Section 1R05.4b)

Inspection Report# : [2007006](#) (pdf)

Significance: N/A Jul 13, 2007

Identified By: NRC

Item Type: FIN Finding

Failure to Meet Separation Requirements for Redundant Trains

The inspectors identified a violation of 10 CFR Part 50, Appendix R, Section III.G.2, involving the licensee's failure to ensure, in the event of a severe fire, that one redundant train of systems necessary to achieve and maintain hot shutdown (HSD) conditions was free of fire damage. Specifically, in the event of a severe fire in Fire Zone 151 in Fire Area A02, the licensee failed to ensure that cables and/or circuits of one redundant train of charging pumps were adequately protected by a 20-foot separation with no intervening combustibles. The violation was entered into the licensee's corrective action program (CAP) as 01101444, "Compliance with Appendix R, Section III.G.2 in Fire Zone 151," dated July 12, 2007. The licensee initiated compensatory measures and will evaluate the violation during transition to NFPA 805. The inspectors determined there was no cross-cutting aspect to this finding.

This finding was more than minor because the finding was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the licensee's failure to ensure that cables and/or circuits of one redundant train of charging pumps were adequately protected, by maintaining a 20-foot separation with no intervening combustibles, left the charging pumps' cables and/or circuits vulnerable to fire damage and did not ensure the availability and reliability of systems that respond to initiating events. Because the NRC-identified violation was a circuit-related finding that was not associated with a finding of high safety significance (Red), the inspectors evaluated the violation in accordance with the four criteria established by Section A of the NRC's Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues (10 CFR Part 50.48) for a licensee in NFPA 805 transition. The inspectors determined that for this violation: (1) the licensee would have identified the violation during the scheduled transition to 10 CFR Part 50, Section 48(c); (2) the licensee had established adequate compensatory measures within a reasonable time frame following identification and would correct the violation as a result of completing the NFPA 805 transition; (3) the violation was not likely to have been previously identified by routine licensee efforts; and (4) the violation was not willful. As a result, the inspectors concluded that the violation met all four criteria established by Section A, and the NRC is exercising enforcement discretion to not cite this violation in accordance with the NRC's Enforcement Policy. (Section 1R05.2b.1)

Inspection Report# : [2007006](#) (pdf)

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement Work Instructions for Preventive Maintenance on Safety-Related Battery Chargers

The inspectors identified a NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for failure to accomplish required preventive maintenance resulting in the D-108 Station Battery output becoming unstable on several occasions. In January 2007, the D-09 Battery Charger also failed as a result of failure to perform scheduled preventive maintenance. The licensee initiated condition reports, took immediate corrective actions to repair the chargers and is performing an apparent cause evaluation.

The inspectors concluded that the finding is greater than minor because if left uncorrected, the finding would become a more significant safety concern, in that, failures of safety-related battery chargers can significantly challenge the vital 125V DC system. In addition, the finding is associated with the equipment performance attribute of the Mitigating System cornerstone and affects the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences, (such as, core damage). Since the finding is not a loss of system safety function and is not an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time, the finding is considered to be of very low safety significance (Green). The inspectors also determined that the primary cause of this finding is related to the cross-cutting area of human performance (H.3(b)). Specifically, the licensee did not appropriately coordinate work activities to support long-term equipment reliability and maintenance scheduling, which was not more preventive than reactive, as critical preventative maintenance for battery chargers was not performed.

Inspection Report# : [2007003](#) (*pdf*)

G

Significance: Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Program for Preventive Maintenance of Breaker Mechanism Operated Control Switches

The inspectors identified a NCV of 10 CFR Part 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," of very low safety significance (Green), for the failure to incorporate available internal and external Operating Experience (OE) pertaining to 4.16kV switchgear cubicle Mechanism Operated Control (MOC) switch assemblies. Preventive maintenance procedures for Westinghouse 4.16kV switchgear cubicles had not been revised to incorporate important MOC switch linkage measurements, adjustments and verification of contact position. The licensee initiated condition reports and is revising procedures to incorporate required preventive maintenance.

The inspectors concluded that the finding is greater than minor, because, if left uncorrected, the finding would become a more significant safety concern. The finding also affects the procedure quality attribute of the Mitigating System cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (such as, core damage). Since the finding is not a loss of system safety function and is not an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time, the finding is considered to be of very low safety significance (Green). Additionally, the inspectors determined that the contributing cause of the finding is related to the cross-cutting area of Problem Identification and Resolution within the component of OE (P.2(b)). The licensee did not implement and institutionalize OE through changes to station processes and procedures, as appropriate preventive maintenance procedures and routines were not established.

Inspection Report# : [2007003](#) (*pdf*)

G

Significance: Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to have Procedures Appropriate to the Circumstances for Terry Turbine Overhauls

The inspectors identified a finding of very low safety significance and a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to ensure that procedures associated with the maintenance of the TDAFW turbines were appropriate to the circumstances. Specifically, the licensee's maintenance overhaul procedure did not address the following significant issues: 1) specify acceptance criteria and as-left requirements for thrust bearing axial clearance; 2) specify instructions to ensure the proper setting and critical dimensions for the proper pump to turbine coupling stretch; 3) correctly establish the turbine to wheel nozzle lap setting; and 4) specify proper placement of insulation on the turbine. The licensee entered the issue into their corrective action program and took immediate corrective actions. At the end of the inspection period the licensee

continued to evaluate the causes and corrective actions to address this finding.

The finding was more than minor because, if left uncorrected, the issue would have become a more significant safety concern. In addition, it affected the Mitigating Systems attributes of equipment performance availability and reliability, and maintenance procedure quality, as well as the Mitigating Systems cornerstone objective of ensuring the reliability of systems. The inspectors determined this programmatic finding was not a design qualification deficiency resulting in a loss of function per Generic Letter 91-18, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk-significant due to a seismic, fire, flooding, or severe weather initiating event. Therefore, the finding was considered to be of very low safety significance (Green). The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee failed to ensure that procedures were adequate and accurate to assure nuclear safety (H.2(c)).

Inspection Report# : [2007008](#) (*pdf*)

G

Significance: Jun 30, 2007

Identified By: NRC

Item Type: FIN Finding

Failure to have Specific Formal Training for Maintenance Craft on Terry Turbine Overhauls

The inspectors identified a finding of very low significance (Green) with no associated violation for the failure to provide appropriate training for maintenance personnel performing overhauls on the TDAFW pump turbines. Specifically, while maintenance personnel received training on some of the individual components associated with a turbine, the mechanic-electrician (mechanical) training program did not require specialty task training for turbine overhauls. In addition, this was contrary to standard industry guidelines for training and qualification of maintenance personnel. The licensee entered the issue into their corrective action program and took immediate corrective actions. At the end of the inspection period the licensee continued to evaluate the causes and corrective actions to address this finding.

The finding was more than minor because, if left uncorrected, the issue would have become a more significant safety concern. In addition, it affected the Mitigating Systems attributes of equipment performance availability and reliability, and to pre-event human error, as well as the Mitigating Systems cornerstone objective of ensuring the reliability of systems. The inspectors determined this programmatic finding was not a design qualification deficiency resulting in a loss of function per Generic Letter 91-18, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk-significant due to a seismic, fire, flooding, or severe weather initiating event. Therefore, the finding was considered to be of very low safety significance (Green). The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee failed to assure that training of personnel was adequate to assure nuclear safety (H.2(b)).

Inspection Report# : [2007008](#) (*pdf*)

G

Significance: Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to have Procedures Appropriate to the Circumstances for the Analysis and Sampling of Safety-Related Turbine and Pump Oil

The inspectors identified a finding of very low safety significance (Green) and a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to adequately implement an oil analysis program for the TDAFW pump. The inspectors identified that the licensee failed to implement sampling guidelines using industry standards or provide an adequate justification for not performing the samples at reasonable intervals. The licensee entered the issue into their corrective action program and took immediate corrective actions. At the end of the inspection period the licensee continued to evaluate the causes and corrective actions to address this finding.

The finding was more than minor because if left uncorrected, the failure to have an adequate procedure for lubrication could result in the TDAFW pump being degraded without the knowledge of the licensee. The inspectors determined the finding did not result in an actual loss of safety function of a system or train of equipment; therefore, the finding was considered to be of very low safety significance (Green). The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee did not ensure that procedures were adequate and accurate to assure nuclear safety (H.2(c)).

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement a Quarantining Process

The inspectors identified a finding of very low safety significance (Green) and a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to adequately quarantine a component for subsequent causal analysis. The inspectors identified that the licensee failed to implement procedural controls to quarantine degraded components during troubleshooting and maintenance activities which resulted in the loss of evidence for causal analysis. The licensee entered the issue into their corrective action program, implemented interim quarantine controls, and issued a new Procedure, NP 1.1.17 "Quarantine of Areas, Equipment, and Records."

The finding was more than minor because if left uncorrected, the failure to properly quarantine items could become a more significant safety concern, since the failure to do so could impede the identification of causes for conditions adverse to quality and prevent the implementation of appropriate corrective actions. The inspectors determined the finding was not a design qualification deficiency resulting in a loss of function per Generic Letter 91-18, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk-significant due to a seismic, fire, flooding, or severe weather initiating event. Therefore, the finding was considered to be of very low safety significance (Green). The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee did not ensure that procedures were adequate and accurate to assure nuclear safety (H.2(c)).

Inspection Report# : [2007008](#) (pdf)

Barrier Integrity

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Establish Appropriate Test conditions for Leak-Rate Testing Outside Containment

The inspectors identified a NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," for the failure to have procedures appropriate to the circumstances, which established the appropriate test conditions for primary coolant sources testing outside containment. Specifically, testing procedures, which satisfied Technical Specification 5.5.2, "Primary Coolant Sources Outside Containment," did not ensure that residual deposits of boric acid on the containment spray, high head and low head safety injection systems were removed, so that active system fluid leaks could be identified as required during the tests. The issue was entered into the licensee's corrective action program (CAP), the licensee took immediate corrective actions, and performed a causal evaluation at the end of this inspection.

The inspectors evaluated the finding using IMC 0609, "Appendix A, "Determining the Significance of Reactor Inspection Findings for At-Power Situations." The finding screened as very low safety significance (Green) because the finding did not: represent the degradation of the radiological barrier function provided for the auxiliary building; represent a degradation of the barrier function of the control room; and did not represent an actual open pathway in the physical integrity of reactor containment. The inspectors also determined that the primary cause of this finding is related to the cross-cutting area of human performance (H.2(c)). Specifically, under the component of resources, the licensee failed to ensure that procedures were adequate and accurate to assure nuclear safety.

Inspection Report# : [2007003](#) (pdf)

Significance:  Mar 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain Design Margin for Control Room Emergency Filtration Fan Thermal Overload Trips

A non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, "Design Control," having very low safety significance was self-revealed for the failure to maintain sufficient design margin for the expected running currents of the control room emergency filtration system fans to their thermal overload trip settings. This occurred due to design errors in a modification that replaced the fans in October 2006. Control Room Emergency Filtration System (CREFS) Fan W-1-B tripped on a breaker thermal overload during surveillance testing in February 2007 with low outside ambient air temperature (approximately negative 11°Fahrenheit). Licensee analyses also demonstrated that a trip of fan W-14A could have occurred for the combination of low ambient temperature and degraded grid voltage. The licensee took immediate corrective actions to replace the breaker thermal overloads with thermal overloads of a higher setting as a result of troubleshooting and evaluations performed following the trip of the W-14B fan. The issue was entered into the licensee's corrective action program and a root cause evaluation was subsequently performed.

The finding is greater than minor because it is associated with the attribute of maintaining radiological barrier functionality of the control room and affected the Barrier Integrity cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Loss of CREFS fans during a release could result in increased dose to the operators in the control room potentially affecting control room habitability. Although the finding involved a potential failure of the CREFS to provide its filtration function, the simultaneous occurrence of low outside air temperature, degraded grid voltage, and a radiological release is of very low probability. The finding for the failure to provide the correct thermal overload trip setting is a design deficiency that has a cross-cutting aspect in the area of human performance in that resources were not effective in maintaining long-term plant safety by maintenance of design margins.
Inspection Report# : [2007002](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: N/A Dec 31, 2006

Identified By: NRC

Item Type: AV Apparent Violation

NRC to Review Items in Confirmatory Order Dated January 3, 2007, for Employment Discrimination Settlement

In a letter dated January 3, 2007 (ADAMS Accession Number ML063630336), the NRC issued a Confirmatory Order to the licensee as part of a settlement agreement through the NRC's Alternative Dispute Resolution (ADR) process. The NRC investigated an alleged violation of 10 CFR 50.7, "Employee Protection," to determine whether a senior reactor operator was the subject of retaliation for raising a nuclear safety concern in the licensee's corrective action

program. This issue was resolved through the NRC's ADR program and will be tracked as Apparent Violation (AV) 05000266/2006013-05; 05000301/2006013-05 pending NRC review of the licensee's completion of items specified in the Confirmatory Order.

Inspection Report# : [2006013](#) (*pdf*)

Last modified : February 04, 2008

Point Beach 2

1Q/2008 Plant Inspection Findings

Initiating Events

Significance:  Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Take Prompt Corrective Actions for Recurring Cold Weather Issues

The inspectors identified a finding and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," having very low safety significance (Green) for the license's failure to take prompt corrective actions to address recurring cold weather issues in the facade building which again occurred in January 2008. The failure to take prompt corrective actions led to the formation of ice on offsite power and plant equipment cable trays and cabling, which supplied offsite power to both Units' busses. The sheets of ice were also in proximity to the Unit 2 refueling water storage tank level indicators and outlet piping. The licensee initiated condition reports, took immediate corrective actions, and was performing a causal evaluation at the end of the inspection period.

The finding is more than minor because if left uncorrected the finding would become a more significant safety concern in that the formation of ice in the facade building in this case could have affected safety related equipment. Because the ice buildup in the Unit 2 facade was an external factor and transient initiator contributor that did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available, the finding is considered to be of very low safety significance (Green). This finding has a cross-cutting aspect in the area of problem identification and resolution because the licensee did not take appropriate corrective actions in a timely manner, commensurate with their safety significance and complexity.

Inspection Report# : [2008002](#) (*pdf*)

Significance:  Dec 31, 2007

Identified By: NRC

Item Type: FIN Finding

Failure to Control Loose Materials Classified as Tornado Hazards

The inspectors identified a finding of very low safety significance with no associated violation of regulatory requirements for the licensee's failure to control loose materials in the protected area. Specifically, the inspectors identified materials that were classified as tornado hazards per station procedure PC 99 near the Unit 1 and Unit 2 main and auxiliary transformers and the switchyard boundary. Once notified, the licensee entered the issue into its corrective action program and removed the materials. In addition, a procedure change request was initiated to incorporate tornado hazard walkdowns into the abnormal operating procedure for severe weather response.

The finding is more than minor because if left uncorrected, the loose items would become a more significant safety concern. The finding is of very low safety significance (Green) because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of problem identification and resolution in that the licensee failed to take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance and complexity (P.1(d)).

Inspection Report# : [2007005](#) (*pdf*)

Significance:  Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Inadvertent Chemical and Volume Control System Letdown Isolation Due to Inadequate Instructions, Procedures, and Drawings

A self-revealing finding and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for the failure to have procedures appropriate to the circumstances for modifying the Unit 1 Charging Pump 1P-2B wiring as part of Modification MR 04-013*B, "CVCS [Chemical and Volume Control System] Charging Pump Variable Frequency Drives." Specifically, instructions were not provided to prevent isolation of reactor coolant letdown flow while performing wiring modifications for the 1P-2B Charging Pump. The licensee entered the issue into their corrective action program and took immediate corrective actions. The licensee continued to evaluate the causes and corrective actions to address this finding at the end of the inspection period.

The finding is greater than minor because it is associated with the design control and procedural quality attributes of the Initiating Events Cornerstone and affected the cornerstone objectives to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Additionally, the inadequate design review process that caused this problem, if left uncorrected, would become a more significant safety concern. The finding is of very low safety significance (Green) because the letdown isolation that occurred did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. The inspectors also determined that the primary cause for this finding is related to the cross-cutting area of human performance. Specifically, under the component of resources, the licensee failed to ensure complete, accurate, and up-to-date installation workplans for modification of the 1P-2B Charging Pump wiring

Inspection Report# : [2007004](#) (pdf)

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Appropriate Maintenance on Air-Operated Valve Positioner Linkage

A self-revealing finding and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," having very low safety significance (Green), was identified for failure to have procedures appropriate to the circumstances for maintenance on air-operated valve positioners, when hardware attaching the connecting link between the Unit 1 "B" feedwater regulating valve positioner and actuator became disconnected resulting in loss of control of the valve. Specifically, there were no procedures that ensured that positioner arm hardware was properly secured. The licensee repaired valve positioners as required, performed an extent-of-condition review for similar valve positioners and is performing a root cause evaluation.

The inspectors concluded the finding is greater than minor because the finding was associated with the equipment performance attribute of the Initiating Events Cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The transient initiator contributor was a reactor trip that did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. Consequently, the finding is considered to be of very low safety significance (Green). The inspectors also determined that the primary cause of this finding is related to the cross-cutting area of human performance (H.2.(c)). Specifically, under the component of resources, the licensee failed to ensure complete, accurate, and up-to-date procedures and work packages for work on air-operated valve positioners were available.

Inspection Report# : [2007003](#) (pdf)

Mitigating Systems

Significance:  Dec 31, 2007

Identified By: NRC

Item Type: FIN Finding

Failure to Adequately Assess Operability of Service Water Pump P-32C

A self-revealed finding with no associated violation of regulatory requirements was identified for an inadequate operability evaluation performed in June 2007 for service water pump P-32C. Specifically, the pump failed its inservice test (IST) on high vibrations after approximately six hours of operation, but the operability evaluation had concluded the pump vibrations would not reach the out-of-service limit until after 120 hours of continuous operation. Contributing to the unanticipated early failure was the use of non-conservative decision-making and the use of a non-conservative assumption in the pump's vibration prediction model. The licensee entered this issue into its corrective

action program and P-32C was subsequently repaired and returned to service.

The finding is more than minor because it could reasonably be viewed as a precursor to a significant event. The finding is of very low safety significance (Green) because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the Technical Specification (TS) allowed outage time, and no risk due to external events. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance. Specifically, the licensee failed to use conservative assumptions in decision-making affecting operability of safety-related equipment (H.1(b)).

Inspection Report# : [2007005](#) (pdf)

Significance:  Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Operability Evaluations for Turbine-Driven Auxiliary Feedwater Pump 2P-29

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to adequately assess operability of the Unit 2 2P-29 turbine-driven auxiliary feedwater (TDAFW) pump. The licensee failed to implement procedural requirements regarding the immediate assessment of operability on September 24 and September 27, 2007, for the increased water ingress into the turbine outboard bearing housing for the pump following maintenance activities. The licensee took corrective actions, which included performing an operability evaluation on November 1 when the next scheduled test again revealed higher than normal levels of water in the bearing oil. However, the inspectors continued to identify, in the subsequent revisions to the operability determination, that the licensee failed to utilize all the data available to assess pump operability. At the end of the inspection period, the licensee continued to evaluate the causes and corrective actions to address this finding.

The finding is more than minor because, if left uncorrected, the failure to properly assess operability would result in the TDAFW pump being degraded, and possibly inoperable for more than the allowed outage time in accordance with TSs with no action being taken. The finding is of very low safety significance (Green) because the inadequate operability determination did not result in exceeding the allowed outage time of TSs before action was taken. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance. Specifically, the licensee failed to use conservative assumptions in decision-making affecting operability of safety-related equipment (H.1(b)).

Inspection Report# : [2007005](#) (pdf)

Significance:  Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Have Adequate Procedures for the Refueling Water Storage Tank

A self-revealed finding and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," were identified for the failure to have adequate procedures to allow operators to properly set the thermostat of the Unit 2 refueling water storage tank (RWST) heaters and to ensure the RWST was recirculated frequently enough for the temperature indicator to accurately measure bulk temperature. On September 18, 2007, the Unit 2 RWST was found to be at 105 °F. This temperature exceeded the TS-maximum allowable limit of 100 °F (97 °F parametric) and could not be restored to acceptable limits before the eight-hour TS action statement expired. As a result, a shutdown of Unit 2 was commenced. At 20 percent power, a return to full power began after the RWST temperature was restored to within acceptable limits. It was later identified that the undesired heat-up was caused by the incorrect setting of the controlling thermostat for the RWST heaters.

The finding is more than minor because it is associated with the procedure quality and human performance attributes of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance (Green) because the elevated temperature of the RWST and subsequent shutdown sequence did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance. Specifically, human error prevention techniques were not utilized

prior to and during the thermostat setting task and personnel proceeded in the face of uncertainty and unexpected circumstances (H.4(a)).

Inspection Report# : [2007005 \(pdf\)](#)

Significance:  Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Adequate Post-Maintenance Testing for the Turbine-Driven Auxiliary Feedwater Pumps

The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to conduct adequate post-maintenance testing of the Unit 1 1P-29 turbine-driven auxiliary feedwater (TDAFW) pump following a ten-year overhaul of the turbine in May 2007. Specifically, the ten-year overhaul maintenance included bearing replacement, but the TDAFW pump was not run long enough during testing for bearing temperature to stabilize. The appropriate post-maintenance test would have detected that the bearing temperatures were rising and required evaluation prior to declaring the TDAFW pump operable. The licensee entered the issue into its corrective action program and took immediate corrective actions. Additionally, the licensee initiated changes to the inadequate procedures.

The finding is more than minor because, if left uncorrected, the issue would have become a more significant safety concern. The inspectors determined this finding was not a design qualification deficiency resulting in a loss of function per NRC Generic Letter 91-18, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk-significant due to a seismic, fire, flooding, or severe weather initiating event. Therefore, the finding is considered to be of very low safety significance (Green). Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance. Specifically, the licensee failed to ensure that procedures were adequate and accurate to assure nuclear safety (H.2(c)).

Inspection Report# : [2007005 \(pdf\)](#)

Significance:  Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Evaluate a Condition Adverse to Quality Associated with Turbine-Driven Auxiliary Feedwater Pump 2P-29

The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to implement prompt corrective actions for the degraded oil conditions initially identified with the Unit 2 2P-29 turbine-driven auxiliary feedwater (TDAFW) pump on September 24, 2007, following maintenance. Following an additional oil sample with favorable results, the licensee incorrectly concluded, due to confirmational biases, that the high water content of the first oil sample was an expected condition. The licensee wrote a condition report, but it was closed with no actions taken. In November 2007, the licensee identified that a significant degraded oil condition existed with the pump. The licensee entered the issue into its corrective action program and took immediate corrective actions, including rebuilding the pump turbine. The licensee continued to evaluate the causes and corrective actions to address this finding at the end of the inspection period.

The finding is more than minor because it could reasonably be viewed as a precursor to a significant event. Specifically, the failure to correct the cause of the oil degradation in a timely manner in September 2007 could have resulted in the failure of the 2P-29 TDAFW pump. The finding is of very low safety significance (Green) because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the TS allowed outage time, and no risk due to external events. Additionally, the inspectors determined that the finding had a cross-cutting area aspect in the area of problem identification and resolution. Specifically, the licensee failed to thoroughly evaluate the problem with water ingress into the oil, such that a resolution addressed the cause and extent of condition (P.1(c)).

Inspection Report# : [2007005 \(pdf\)](#)

Significance:  Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Provide Adequate Guidance to Ensure the Operability of the Main Steam System During a Steam Generator Tube Rupture

The inspectors identified a Non-Cited Violation (NCV) of Technical Specification 5.4, "Procedures," for the failure to have adequate procedures to ensure the continued operation of the steam dumps to the condenser to maintain a Reactor Coolant System (RCS) cooldown during a Steam Generator Tube Rupture (SGTR) event. Specifically, the procedures permitted the operators to lock in a Safety Injection (SI) signal and then reset SI more than once, which could cause an automatic closure of the Main Steam Isolation Valves (MSIVs) and a loss of steam dump to the condenser, which could result in a delay in terminating the Primary-To-Secondary Leakage. The licensee has initiated procedure change requests to the SGTR emergency operating procedures as a corrective action for this finding.

This finding was more than minor because it was associated with the attribute of procedure quality, which affected the mitigating systems cornerstone objective of ensuring the availability and reliability of the Main Steam (MS) system to respond to initiating events to prevent undesirable consequences. Steam dump to the condenser is the preferred means of cooling the RCS during a SGTR because it minimizes radiological releases, conserves feedwater, and provides the most rapid cooldown capability. The finding is of very low safety significance based on the results of the SDP Phase 1 screening worksheet. The inspectors concluded that this finding was cross-cutting in the area of human performance, resources (H.2(c)), in that the licensee failed to have complete, accurate, and up-to-date procedures for the response to a SGTR event. This item was described in NRC Inspection Report 2007301, dated August 21, 2007, as Item Numbers 05000266/2007301-01 and 05000301/2007301-01.

Inspection Report# : [2007005](#) (pdf)

Significance:  Dec 14, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Incorrect Factor of Safety Specified in Design Evaluation of Unit 1 SGBD HX Platform

The inspectors identified an NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," that was of very low safety significance involving a calculation that designed the Unit 1 Steam Generator Blowdown (SGBD) Heat Exchanger (HX) Platform to withstand a load from a postulated pipe whip of the condensate return line resulting from a High-Energy Line Break (HELB). The load from a postulated pipe whip applied to the platform was evaluated in calculation PBNP-994-10-S01, "SGBD HX Platform Mod. For Addition of Pipe Rupture Restraint for Condensate Return Line" which was approved on April 28, 2007. As a result of this calculation, the design function of the Unit 1 SGBD HX Platform was revised to hold and maintain the steam generator blowdown heat exchangers and condensate return line in position and assure that the platform did not fall onto the safety related Refueling Water Storage Tank (RWST) during a safe shutdown earthquake and a HELB simultaneously. Specifically, the licensee failed to correctly use the original design anchor bolt safety factor in the supporting calculation. This issue was entered into the licensee's corrective action program as condition report CAP 1118144.

The issue was more than minor because the calculation error would be expected to necessitate extensive calculation rework and possibly a modification in order to demonstrate that the platform meets design acceptance limits commensurate with those applied to original design. The finding screened as having very low safety significance (Green) because the inspectors answered "yes" to question 1 under the Mitigating Systems Cornerstone column of the Phase 1 worksheet. Specifically, the platform remained "operable but degraded". The cause of the finding was related to the cross-cutting element in Human Performance, Work Practices because the licensee did not ensure supervisory and management oversight of work activities, including contractors, such that nuclear safety is supported (item H.4(c) of IMC 0305). The licensee had failed to correctly use the original design anchor bolt safety factor in all three revisions of the design basis calculation.

Inspection Report# : [2007007](#) (pdf)

Significance:  Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Service Water System Microbiologically-Induced Corrosion through-Wall Leak Due to Inadequate Corrective Actions

A self-revealing finding and associated NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified for the failure to take prompt corrective action for microbiologically-induced corrosion (MIC) of the

service water (SW) piping. Specifically, the SW Inservice Inspection Program failed to identify SW pipe thinning prior to MIC causing a through-wall leak because the non-destructive examination method used, specifically radiography, was inadequate for detecting MIC. The limited ability for identifying MIC with radiography was a known problem and was previously documented in the licensee's corrective action program in 2005; however, prompt corrective actions were not taken. For the 2007 leak, the licensee took immediate corrective actions to replace the leaking SW pipe and proposed changes to the SW Inservice Inspection Program that would enhance the site's ability to identify potential sources of MIC in the SW system and correct the program issues initially identified in 2005.

The issue is greater than minor because it is associated with the equipment performance attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. In addition, if left uncorrected, the finding would become a more significant safety concern. The finding is of very low safety significance (Green) because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the Technical Specification (TS) allowed outage time, and no risk due to external events. Additionally, the inspectors determined that the primary cause of the finding is related to the cross-cutting area of problem identification and resolution. Specifically, under the component of corrective action program, the licensee failed to take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance and complexity

Inspection Report# : [2007004](#) (pdf)

Significance:  Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Correct Previous Indication of Degraded Oil in Component Cooling Water Pump

The inspectors identified an NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to implement prompt corrective actions for the degraded oil conditions initially identified with safety-related Component Cooling Water (CCW) Pump 1P-11B in March 2007. Following an additional oil sample with anomalous results in July 2007, the licensee declared the pump inoperable and performed troubleshooting and repair of CCW Pump 1P-11B. The licensee entered the issue into their corrective action program and took immediate corrective actions. The licensee continued to evaluate the causes and corrective actions to address this finding at the end of the inspection period.

The finding is greater than minor because it could reasonably be viewed as a precursor to a significant event. Specifically, the failure to promptly correct the cause of the oil degradation in a timely manner in March 2007 could have resulted in the failure of the CCW pump. Additionally, the finding is associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance (Green) because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the TS allowed outage time, and no risk due to external events. Additionally, the inspectors determined that the primary cause of the finding is related to the cross-cutting area of problem identification and resolution. Specifically, under the component of corrective action program, the licensee failed to take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance and complexity

Inspection Report# : [2007004](#) (pdf)

Significance:  Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Incorrect Calibration Methods for Engineered Safeguards Actuation System Instrumentation, Lead/Lag Time Constants for Steam Line Pressure

A self-revealing finding and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for the failure to have adequate maintenance procedures for performing calibration of the Engineered Safeguards Feature Actuation System (ESFAS) instrumentation steam pressure compensator modules. Specifically, instructions were not correct or sufficiently detailed to determine mathematical values from graphical displays of circuit output used in performing the subject calibrations.

The finding is greater than minor because it is associated with the equipment performance attribute of the Mitigating

Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the TS allowed outage time, and no risk due to external events. The inspectors also determined that the primary cause of this finding is related to the cross-cutting area of human performance. Specifically, under the component of resources, the licensee failed to ensure complete, accurate and up-to-date procedures for calibration of the ESFAS instrumentation steam pressure compensator modules

Inspection Report# : [2007004](#) (*pdf*)

Significance: **G** Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Account for MOV Stalling Delays for ECCS Response Time Analysis

Inspection Report# : [2007004](#) (*pdf*)

Significance: **G** Jul 13, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Promptly Correct Non-Compliant Sprinkler Heads in the EDG Rooms

The inspectors identified a finding of very low safety significance and an associated NCV of the PBNP's Operating License for failure to take prompt corrective action for a condition adverse to quality. Specifically, in July 2002, the licensee identified that four sprinkler heads located in Fire Zones 308 and 309 (i.e., emergency diesel generator (EDG) rooms G-01 and G-02, respectively) were not in compliance with the NFPA 13-1966 Code, Section 3066. The violation was entered into the licensee's CAP as 01101421, "Untimely Corrective Actions," dated July 12, 2007, to increase the priority of the modification that was to correct the sprinkler heads' non-compliant condition. The finding has a cross-cutting aspect in the area of problem identification and resolution because the licensee did not take appropriate corrective action to address the safety issue in a timely manner commensurate with its safety significance and complexity.

This finding was more than minor because the finding was associated with the protection against external factors (i.e., fire) attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the licensee's failure to promptly correct the lack of return bends condition for four sprinkler heads in the EDG rooms and take appropriate action to restore the operability of these sprinkler heads in a timely manner could have affected the suppression capability of the fire suppression systems in these rooms. The finding was of very low safety significance based on a Phase 2, SDP evaluation completed in accordance with IMC 0609, Appendix F, "Fire Protection Significance Determination Process." (Section 1R05.4b)

Inspection Report# : [2007006](#) (*pdf*)

Significance: N/A Jul 13, 2007

Identified By: NRC

Item Type: FIN Finding

Failure to Meet Separation Requirements for Redundant Trains

The inspectors identified a violation of 10 CFR Part 50, Appendix R, Section III.G.2, involving the licensee's failure to ensure, in the event of a severe fire, that one redundant train of systems necessary to achieve and maintain hot shutdown (HSD) conditions was free of fire damage. Specifically, in the event of a severe fire in Fire Zone 151 in Fire Area A02, the licensee failed to ensure that cables and/or circuits of one redundant train of charging pumps were adequately protected by a 20-foot separation with no intervening combustibles. The violation was entered into the licensee's corrective action program (CAP) as 01101444, "Compliance with Appendix R, Section III.G.2 in Fire Zone 151," dated July 12, 2007. The licensee initiated compensatory measures and will evaluate the violation during transition to NFPA 805. The inspectors determined there was no cross-cutting aspect to this finding.

This finding was more than minor because the finding was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage).

Specifically, the licensee's failure to ensure that cables and/or circuits of one redundant train of charging pumps were

adequately protected, by maintaining a 20-foot separation with no intervening combustibles, left the charging pumps' cables and/or circuits vulnerable to fire damage and did not ensure the availability and reliability of systems that respond to initiating events. Because the NRC-identified violation was a circuit-related finding that was not associated with a finding of high safety significance (Red), the inspectors evaluated the violation in accordance with the four criteria established by Section A of the NRC's Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues (10 CFR Part 50.48) for a licensee in NFPA 805 transition. The inspectors determined that for this violation: (1) the licensee would have identified the violation during the scheduled transition to 10 CFR Part 50, Section 48(c); (2) the licensee had established adequate compensatory measures within a reasonable time frame following identification and would correct the violation as a result of completing the NFPA 805 transition; (3) the violation was not likely to have been previously identified by routine licensee efforts; and (4) the violation was not willful. As a result, the inspectors concluded that the violation met all four criteria established by Section A, and the NRC is exercising enforcement discretion to not cite this violation in accordance with the NRC's Enforcement Policy. (Section 1R05.2b.1)

Inspection Report# : [2007006](#) (pdf)

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement Work Instructions for Preventive Maintenance on Safety-Related Battery Chargers

The inspectors identified a NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for failure to accomplish required preventive maintenance resulting in the D-108 Station Battery output becoming unstable on several occasions. In January 2007, the D-09 Battery Charger also failed as a result of failure to perform scheduled preventive maintenance. The licensee initiated condition reports, took immediate corrective actions to repair the chargers and is performing an apparent cause evaluation.

The inspectors concluded that the finding is greater than minor because if left uncorrected, the finding would become a more significant safety concern, in that, failures of safety-related battery chargers can significantly challenge the vital 125V DC system. In addition, the finding is associated with the equipment performance attribute of the Mitigating System cornerstone and affects the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences, (such as, core damage). Since the finding is not a loss of system safety function and is not an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time, the finding is considered to be of very low safety significance (Green). The inspectors also determined that the primary cause of this finding is related to the cross-cutting area of human performance (H.3(b)). Specifically, the licensee did not appropriately coordinate work activities to support long-term equipment reliability and maintenance scheduling, which was not more preventive than reactive, as critical preventative maintenance for battery chargers was not performed.

Inspection Report# : [2007003](#) (pdf)

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Program for Preventive Maintenance of Breaker Mechanism Operated Control Switches

The inspectors identified a NCV of 10 CFR Part 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," of very low safety significance (Green), for the failure to incorporate available internal and external Operating Experience (OE) pertaining to 4.16kV switchgear cubicle Mechanism Operated Control (MOC) switch assemblies. Preventive maintenance procedures for Westinghouse 4.16kV switchgear cubicles had not been revised to incorporate important MOC switch linkage measurements, adjustments and verification of contact position. The licensee initiated condition reports and is revising procedures to incorporate required preventive maintenance.

The inspectors concluded that the finding is greater than minor, because, if left uncorrected, the finding would become a more significant safety concern. The finding also affects the procedure quality attribute of the Mitigating System cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (such as, core damage). Since the finding is not a loss of system safety function and is not an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time, the finding is considered to be of very low safety significance (Green). Additionally, the inspectors determined that the contributing cause of the finding is related to the cross-cutting area of Problem Identification and Resolution

within the component of OE (P.2(b)). The licensee did not implement or institutionalize OE through changes to station processes and procedures, as appropriate preventive maintenance procedures and routines were not established.

Inspection Report# : [2007003](#) (pdf)

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to have Procedures Appropriate to the Circumstances for Terry Turbine Overhauls

The inspectors identified a finding of very low safety significance and a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to ensure that procedures associated with the maintenance of the TDAFW turbines were appropriate to the circumstances. Specifically, the licensee's maintenance overhaul procedure did not address the following significant issues: 1) specify acceptance criteria and as-left requirements for thrust bearing axial clearance; 2) specify instructions to ensure the proper setting and critical dimensions for the proper pump to turbine coupling stretch; 3) correctly establish the turbine to wheel nozzle lap setting; and 4) specify proper placement of insulation on the turbine. The licensee entered the issue into their corrective action program and took immediate corrective actions. At the end of the inspection period the licensee continued to evaluate the causes and corrective actions to address this finding.

The finding was more than minor because, if left uncorrected, the issue would have become a more significant safety concern. In addition, it affected the Mitigating Systems attributes of equipment performance availability and reliability, and maintenance procedure quality, as well as the Mitigating Systems cornerstone objective of ensuring the reliability of systems. The inspectors determined this programmatic finding was not a design qualification deficiency resulting in a loss of function per Generic Letter 91-18, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk-significant due to a seismic, fire, flooding, or severe weather initiating event. Therefore, the finding was considered to be of very low safety significance (Green). The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee failed to ensure that procedures were adequate and accurate to assure nuclear safety (H.2(c)).

Inspection Report# : [2007008](#) (pdf)

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: FIN Finding

Failure to have Specific Formal Training for Maintenance Craft on Terry Turbine Overhauls

The inspectors identified a finding of very low significance (Green) with no associated violation for the failure to provide appropriate training for maintenance personnel performing overhauls on the TDAFW pump turbines. Specifically, while maintenance personnel received training on some of the individual components associated with a turbine, the mechanic-electrician (mechanical) training program did not require specialty task training for turbine overhauls. In addition, this was contrary to standard industry guidelines for training and qualification of maintenance personnel. The licensee entered the issue into their corrective action program and took immediate corrective actions. At the end of the inspection period the licensee continued to evaluate the causes and corrective actions to address this finding.

The finding was more than minor because, if left uncorrected, the issue would have become a more significant safety concern. In addition, it affected the Mitigating Systems attributes of equipment performance availability and reliability, and to pre-event human error, as well as the Mitigating Systems cornerstone objective of ensuring the reliability of systems. The inspectors determined this programmatic finding was not a design qualification deficiency resulting in a loss of function per Generic Letter 91-18, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk-significant due to a seismic, fire, flooding, or severe weather initiating event. Therefore, the finding was considered to be of very low safety significance (Green). The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee failed to assure that training of personnel was adequate to assure nuclear safety (H.2(b)).

Inspection Report# : [2007008](#) (pdf)

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to have Procedures Appropriate to the Circumstances for the Analysis and Sampling of Safety-Related Turbine and Pump Oil

The inspectors identified a finding of very low safety significance (Green) and a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to adequately implement an oil analysis program for the TDAFW pump. The inspectors identified that the licensee failed to implement sampling guidelines using industry standards or provide an adequate justification for not performing the samples at reasonable intervals. The licensee entered the issue into their corrective action program and took immediate corrective actions. At the end of the inspection period the licensee continued to evaluate the causes and corrective actions to address this finding.

The finding was more than minor because if left uncorrected, the failure to have an adequate procedure for lubrication could result in the TDAFW pump being degraded without the knowledge of the licensee. The inspectors determined the finding did not result in an actual loss of safety function of a system or train of equipment; therefore, the finding was considered to be of very low safety significance (Green). The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee did not ensure that procedures were adequate and accurate to assure nuclear safety (H.2(c)).

Inspection Report# : [2007008](#) (*pdf*)

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement a Quarantining Process

The inspectors identified a finding of very low safety significance (Green) and a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to adequately quarantine a component for subsequent causal analysis. The inspectors identified that the licensee failed to implement procedural controls to quarantine degraded components during troubleshooting and maintenance activities which resulted in the loss of evidence for causal analysis. The licensee entered the issue into their corrective action program, implemented interim quarantine controls, and issued a new Procedure, NP 1.1.17 "Quarantine of Areas, Equipment, and Records."

The finding was more than minor because if left uncorrected, the failure to properly quarantine items could become a more significant safety concern, since the failure to do so could impede the identification of causes for conditions adverse to quality and prevent the implementation of appropriate corrective actions. The inspectors determined the finding was not a design qualification deficiency resulting in a loss of function per Generic Letter 91-18, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk-significant due to a seismic, fire, flooding, or severe weather initiating event. Therefore, the finding was considered to be of very low safety significance (Green). The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee did not ensure that procedures were adequate and accurate to assure nuclear safety (H.2(c)).

Inspection Report# : [2007008](#) (*pdf*)

Barrier Integrity

Significance:  Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Take Prompt Corrective Actions for Conditions Adverse to Quality Associated with the PAB Crane

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," for the license's failure to implement prompt corrective actions for the degraded conditions initially identified with the single failure proof primary auxiliary building crane by maintenance personnel on January 17, 2008. As a result, on March 4, while a new fuel storage canister was being lowered in a laydown area after traversing the width of the spent fuel pool, the crane failed to the safe position with the load suspended approximately one foot off the floor. In a review of work order and corrective action history, the inspectors determined that all of the degraded conditions from January were not corrected during maintenance on February 21. The licensee entered the issue into its corrective action program and took immediate corrective actions,

including repair of the crane. The licensee continued to evaluate the causes and corrective actions to address this finding at the end of the inspection period.

The finding is more than minor because it could reasonably be viewed as a precursor to a significant event. Specifically, the failure to correct the degraded condition of the primary auxiliary building crane resulted in the failure of the single failure proof crane while in use to move loads over the spent fuel pool. The finding affected the Barrier Integrity Cornerstone and is of very low safety significance (Green) because this spent fuel pool issue did not result in the loss of spent fuel pool cooling, did not result in damage to fuel clad integrity in the spent fuel pool, and did not result in a loss of spent fuel pool inventory. This finding has a cross cutting aspect in the area of problem identification and resolution because the licensee did not take appropriate corrective actions in a timely manner, commensurate with their safety significance and complexity.

Inspection Report# : [2008002](#) (*pdf*)

Significance:  Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Piping Anchor Design not in Conformance with Design Basis Code Requirements

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to evaluate service water piping to pipe anchor integral welded attachments in conformance with the design requirements of the design basis American Society of Mechanical Engineers Boiler and Pressure Vessel Code. The licensee entered this issue into its corrective action program.

This finding is more than minor because it's associated with the design control attribute of the Barrier Integrity Cornerstone and affected the cornerstone objective to maintain the structural integrity of the service water system, structures, and components and the operational capability of the containment fan coolers. The finding was of very low safety significance (Green) based on a Phase 1 screening in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," and Appendix H, "Containment Integrity Significance Determination Process," because pressurized water reactor containment fan coolers impact late containment failure and source terms, but not large early release frequency. There was not a cross-cutting aspect to this finding.

Inspection Report# : [2008002](#) (*pdf*)

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Establish Appropriate Test conditions for Leak-Rate Testing Outside Containment

The inspectors identified a NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," for the failure to have procedures appropriate to the circumstances, which established the appropriate test conditions for primary coolant sources testing outside containment. Specifically, testing procedures, which satisfied Technical Specification 5.5.2, "Primary Coolant Sources Outside Containment," did not ensure that residual deposits of boric acid on the containment spray, high head and low head safety injection systems were removed, so that active system fluid leaks could be identified as required during the tests. The issue was entered into the licensee's corrective action program (CAP), the licensee took immediate corrective actions, and performed a causal evaluation at the end of this inspection.

The inspectors evaluated the finding using IMC 0609, "Appendix A, "Determining the Significance of Reactor Inspection Findings for At-Power Situations." The finding screened as very low safety significance (Green) because the finding did not: represent the degradation of the radiological barrier function provided for the auxiliary building; represent a degradation of the barrier function of the control room; and did not represent an actual open pathway in the physical integrity of reactor containment. The inspectors also determined that the primary cause of this finding is related to the cross-cutting area of human performance (H.2(c)). Specifically, under the component of resources, the licensee failed to ensure that procedures were adequate and accurate to assure nuclear safety.

Inspection Report# : [2007003](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: SL-IV Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate 10 CFR 72.48 Screening to Evaluate Possible Thermal Effects on Fuel Cladding

The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation of 10 CFR 72.48(c)(1) for the licensee's failure to obtain a Certificate of Compliance (CoC) amendment pursuant to 10 CFR 72.244, for changes made in the spent fuel storage cask operating procedures during the 2004 loading campaign as described in the Final Safety Analysis Report. The procedure changes constituted a change in the terms, conditions, or specifications incorporated in the CoC. Although the procedures were contained in the Final Safety Analysis Report, the licensee failed to identify that TS 1.2.17a, "32PT Dry Storage Canister (DSC) Vacuum Drying Duration Limit," was also affected by the procedure change and required prior NRC approval. The licensee implemented corrective actions, which included revising the loading procedure to reflect the sequence described in the FSAR prior to the next cask loading campaign.

This finding is more than minor because it had the potential to impact the NRC's ability to perform its regulatory function, since the licensee failed to receive NRC approval for a change in this licensed activity. The inspectors determined that the finding was not suitable for SDP evaluation because the noncompliance involved 10 CFR Part 72 dry fuel storage activities. Therefore, this finding was reviewed by regional management and dispositioned using traditional enforcement. The finding was determined to be of very low safety significance.

Inspection Report# : [2007005](#) (*pdf*)

Significance: N/A Dec 31, 2006

Identified By: NRC

Item Type: AV Apparent Violation

NRC to Review Items in Confirmatory Order Dated January 3, 2007, for Employment Discrimination Settlement

In a letter dated January 3, 2007 (ADAMS Accession Number ML063630336), the NRC issued a Confirmatory Order to the licensee as part of a settlement agreement through the NRC's Alternative Dispute Resolution (ADR) process. The NRC investigated an alleged violation of 10 CFR 50.7, "Employee Protection," to determine whether a senior reactor operator was the subject of retaliation for raising a nuclear safety concern in the licensee's corrective action program. This issue was resolved through the NRC's ADR program and will be tracked as Apparent Violation (AV) 05000266/2006013-05; 05000301/2006013-05 pending NRC review of the licensee's completion of items specified in the Confirmatory Order.

Inspection Report# : [2006013](#) (*pdf*)

Point Beach 2

2Q/2008 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: FIN Finding

Failure to Properly Store or Secure Tornado Missile Hazards in the Protected Area

The inspectors identified a finding of very low safety significance (Green) with no associated violation of regulatory requirements for the licensee's failure to maintain control over the proper storage and placement of materials within the protected area that were classified as tornado hazards per station Procedure PC 99. Specifically, these unsecured items were identified near the Unit 1 and Unit 2 main and auxiliary transformers, as well as the switchyard boundary. Once notified, the licensee entered the issue into its corrective action program and removed or secured the materials appropriately. At the end of the inspection period, the licensee continued to perform a causal evaluation and develop additional long term corrective actions.

The finding is more than minor because if left uncorrected, the loose items would become a more significant safety concern. The finding is of very low safety significance (Green) because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of problem identification and resolution in that the licensee failed to take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance

Inspection Report# : [2008003](#) (*pdf*)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: FIN Finding

Failure to Implement Appropriate Design and Configuration Control for the Unit Polar Crane

A self-revealed finding of very low significance (Green) with no associated violation of regulatory requirements was identified for the failure to implement appropriate design and configuration control for the Unit 2 polar crane upgrade project, which resulted in issues associated with reliable operation of the polar crane during the first reactor vessel head lift. Specifically, a lack of configuration control on the crane radio system resulted in a loss of radio communications during the initial reactor vessel head lift over the reactor vessel head stand, which resulted in unreliable crane operation. The licensee implemented remedial corrective actions to address the design issues with the polar crane bridge drive motors which resulted in unavailability at the beginning of the outage and ensured the radio receivers were appropriately configured and installed. The licensee performed a root cause analysis to determine the cause of the design and configuration control issues associated with the polar crane and developed additional corrective actions to address this performance deficiency.

The finding is more than minor because it is associated with the design control attribute of the Initiating Events Cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The finding is of very low safety significance (Green) because the finding did not meet the criteria for a Phase 2 or Phase 3 Analysis, as specified in IMC 0609 Appendix G, Attachment 1, Checklist 1, "Pressurized Water Reactor Hot Shutdown Operation: Time to Core Boiling < 2 Hours." The inspectors did not identify a cross-cutting aspect associated with this finding.

Inspection Report# : [2008003](#) (*pdf*)

Significance:  Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Take Prompt Corrective Actions for Recurring Cold Weather Issues

The inspectors identified a finding and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," having very low safety significance (Green) for the license's failure to take prompt corrective actions to address recurring cold weather issues in the facade building which again occurred in January 2008. The failure to take prompt corrective actions led to the formation of ice on offsite power and plant equipment cable trays and cabling, which supplied offsite power to both Units' busses. The sheets of ice were also in proximity to the Unit 2 refueling water storage tank level indicators and outlet piping. The licensee initiated condition reports, took immediate corrective actions, and was performing a causal evaluation at the end of the inspection period.

The finding is more than minor because if left uncorrected the finding would become a more significant safety concern in that the formation of ice in the facade building in this case could have affected safety related equipment. Because the ice buildup in the Unit 2 facade was an external factor and transient initiator contributor that did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available, the finding is considered to be of very low safety significance (Green). This finding has a cross-cutting aspect in the area of problem identification and resolution because the licensee did not take appropriate corrective actions in a timely manner, commensurate with their safety significance and complexity.

Inspection Report# : [2008002](#) (pdf)

Significance:  Dec 31, 2007

Identified By: NRC

Item Type: FIN Finding

Failure to Control Loose Materials Classified as Tornado Hazards

The inspectors identified a finding of very low safety significance with no associated violation of regulatory requirements for the licensee's failure to control loose materials in the protected area. Specifically, the inspectors identified materials that were classified as tornado hazards per station procedure PC 99 near the Unit 1 and Unit 2 main and auxiliary transformers and the switchyard boundary. Once notified, the licensee entered the issue into its corrective action program and removed the materials. In addition, a procedure change request was initiated to incorporate tornado hazard walkdowns into the abnormal operating procedure for severe weather response.

The finding is more than minor because if left uncorrected, the loose items would become a more significant safety concern. The finding is of very low safety significance (Green) because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of problem identification and resolution in that the licensee failed to take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance and complexity (P.1(d)).

Inspection Report# : [2007005](#) (pdf)

Significance:  Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Inadvertent Chemical and Volume Control System Letdown Isolation Due to Inadequate Instructions, Procedures, and Drawings

A self-revealing finding and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for the failure to have procedures appropriate to the circumstances for modifying the Unit 1 Charging Pump 1P-2B wiring as part of Modification MR 04-013*B, "CVCS [Chemical and Volume Control System] Charging Pump Variable Frequency Drives." Specifically, instructions were not provided to prevent isolation of reactor coolant letdown flow while performing wiring modifications for the 1P-2B Charging Pump. The licensee entered the issue into their corrective action program and took immediate corrective actions. The licensee continued to evaluate the causes and corrective actions to address this finding at the end of the inspection period.

The finding is greater than minor because it is associated with the design control and procedural quality attributes of the Initiating Events Cornerstone and affected the cornerstone objectives to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Additionally, the inadequate design review process that caused this problem, if left uncorrected, would become a more significant safety concern. The finding is of very low safety significance (Green) because the letdown isolation that occurred did

not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. The inspectors also determined that the primary cause for this finding is related to the cross-cutting area of human performance. Specifically, under the component of resources, the licensee failed to ensure complete, accurate, and up-to-date installation workplans for modification of the 1P-2B Charging Pump wiring
Inspection Report# : [2007004](#) (pdf)

Mitigating Systems

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Address Sprinkler Head Obstructions in 'B' Train EDG Rooms

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of License Condition 4.F for the failure to address fire suppression sprinkler head obstructions in the 'B' train emergency diesel generator (EDG) rooms. The inspectors identified that five sprinkler heads were obstructed in the 'B' train EDG rooms. National Fire Protection Association (NFPA) 13-1991, "Installation of Sprinkler Systems" was the applicable standard for sprinkler systems installed in the two rooms. The inspectors determined that failure to address sprinkler head obstructions was contrary to NFPA 13-1991 and was a performance deficiency.

The finding was more than minor because the failure to address sprinkler head obstructions was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Factors (Fire) and affected the cornerstone objective of ensuring the capability of systems that respond to initiating events. Specifically, the identified obstructions to sprinkler heads would affect the sprinkler spray patterns and distribution thereby impacting the sprinkler systems capability to control a fire. In accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," and IMC 0609, Appendix F, "Fire Protection Significance Determination Process," the inspectors considered the finding to represent a moderate degradation of the water based suppression system for both rooms. As such, the inspectors performed a Phase 2 SDP. The inspectors concluded that potential fire scenarios associated with the finding were effectively FDS0 fire scenarios as described in Section 2.2 of IMC 609, Appendix F, and that the issue was of very low safety significance (i.e., Green). The inspectors did not identify a cross-cutting aspect associated with this finding.

Inspection Report# : [2008003](#) (pdf)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Manage Online Risk for Breaker 1A52-16C Work

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50.65(a)(4), "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," when the licensee failed to adequately manage the risk associated with work on the 480-VAC Breaker 1B52 16C, coincident with a large number of other out-of-service components, which resulted in an unplanned risk condition for Unit 1 without the appropriate risk management actions. Specifically, the licensee incorrectly assumed that planned work on Breaker 1B52 16C did not render the breaker unavailable, and that the breaker was not utilized in Modes 1, 2, or 3. Consequently, the component was not factored into the Safety Monitor online risk model. However, Breaker 1B52 16C was in fact unavailable and also utilized in abnormal operating procedures for Modes 1, 2 and 3. Therefore, unavailability of the breaker was required to have been factored into Safety Monitor with appropriate risk management actions taken. The licensee took corrective actions to perform an apparent cause evaluation that identified the apparent cause of the issue and recommended a number of corrective actions to address the procedural and human performance deficiencies that were identified.

The finding was greater than minor because the finding was based on incorrect assumptions that changed the outcome of the risk assessment. The inspectors evaluated this finding using the Appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process" worksheets of Manual Chapter 0609 because the finding is a maintenance risk assessment issue. Flowchart 1, "Assessment of Risk Deficit," requires the inspectors to

determine the risk deficit associated with this issue. This finding was determined to be of very low safety significance because the incremental core damage probability deficit was less than 1E 6. The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance. Specifically, the licensee failed to use conservative assumptions in decision-making and adopt a requirement to demonstrate that the proposed action was safe in order to proceed rather than a requirement to demonstrate that it is unsafe in order to disapprove the action
Inspection Report# : [2008003](#) (pdf)

G

Significance: Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate procedures for DY-0C Inverter Maintenance

A self-revealing finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for the failure to have appropriate maintenance procedures and work instructions in place to identify improperly installed components prior to the attempted restoration of the DY-0C white channel instrument inverter. Specifically, the routine maintenance procedure did not contain instructions to check for direct current (DC) grounds following maintenance and prior to restoration, which allowed a ground to go undetected and cause a number of unplanned Technical Specification Action Condition (TSAC) entries as well as the unplanned inoperability of the G 01 and G 02 EDGs and the 2PI 9046 Containment Pressure Indicator. At the end of the inspection period, the licensee continued to perform a causal evaluation and develop additional long term corrective actions.

The finding was more than minor because it is associated with the Procedure Quality attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors evaluated the finding using IMC 0609, Appendix A, Attachment 1, "Significance Determination of Reactor Inspection Findings for At-Power Situations," dated January 10, 2008. The inspectors determined that the finding was of very low safety significance (Green) because the finding did not involve a design or qualification deficiency, there was no actual loss of safety function, no single train loss of safety function for greater than the technical specification (TS) allowed outage time, and no risk due to external events. The inspectors also determined that the finding had a cross-cutting aspect in the area of human performance. Specifically, procedures were not complete or adequate to ensure that installation errors would be detected prior to restoration of the DY-0C inverter

Inspection Report# : [2008003](#) (pdf)

G

Significance: Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedures for Reduced Inventory with an Intact Reactor Coolant System

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of TS 5.4.1, "Procedures," for the failure to implement operations procedures to remain above the ¾ pipe level indications for draining the RCS while in reduced inventory. Specifically, during the second planned orange risk condition of the Unit 2 refueling outage to facilitate removal of the SG nozzle dams, operators drained the RCS below the procedurally required 22 percent level, as indicated by the most conservative reactor vessel level indication. The licensee took immediate corrective actions to address the issue and was performing a causal evaluation and developing corrective actions at the end of the assessment period.

The finding is more than minor because it is associated with the human performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance (Green) because the finding did not meet the criteria for a Phase 2 or Phase 3 Analysis, as specified in IMC 0609 Appendix G, Attachment 1, Checklist 3, "PWR Cold Shutdown Operation RCS Open and Refueling Cavity Level <23' or RCS Closed and No Inventory in Pressurizer Time to Boiling < 2 hours." The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance. Specifically, the licensee failed to use conservative assumptions in decision-making and adopt a requirement to demonstrate that the proposed action was safe in order to proceed rather than a requirement to demonstrate that it is unsafe in order to disapprove the action

Inspection Report# : [2008003](#) (pdf)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain RCS within Procedurally Allowed level During Reduced Inventory

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of TS 5.4.1, "Procedures," for the failure to protect all of the safety equipment necessary for safe shutdown while in reduced inventory with the reactor coolant system (RCS) intact. Specifically, the licensee failed to ensure that an auxiliary feedwater source and steam generator (SG) were available for decay heat removal when a reduced inventory condition was entered and the RCS was intact. The licensee's responses to Generic Letter 88-17, "Loss of Decay Heat Removal," indicated that the first drain of the RCS to reduced inventory following shutdown could be accomplished with the RCS intact and reflux cooling (with a SG and auxiliary feedwater source) as an alternate decay heat removal path. The licensee was performing a causal evaluation and developing corrective actions at the end of the assessment period.

The finding is more than minor because it is associated with the human performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance (Green) because the finding did not meet the criteria for a Phase 2 or Phase 3 Analysis, as specified in IMC 0609 Appendix G, Attachment 1, Checklist 3, "Pressurized-Water Reactor (PWR) Cold Shutdown Operation Reactor Coolant System (RCS) Open and Refueling Cavity Level <23' or RCS Closed and No Inventory in Pressurizer Time to Boiling < 2 hours." The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance. Specifically, the licensee failed to ensure that procedures were adequate and accurate to assure nuclear safety

Inspection Report# : [2008003](#) (*pdf*)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Maintenance Procedure for Turbine-Driven Auxiliary Feedwater Pump 2P-29

The inspectors identified a finding of very low safety significance (Green) and a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to ensure that procedures associated with the maintenance of the turbine for the turbine-driven auxiliary feedwater pump were appropriate to the circumstances. Specifically, the licensee's maintenance procedures did not address the following significant issues: 1) proper application of sealant material used on turbine casing joints; 2) proper cure time of sealant material used on turbine casing joints; 3) prescribed methods for tightening of the oil deflector ring set screw was not discussed; and 4) acceptable clearances between the turbine shaft and the inner diameter of the oil deflector ring were not specified. The licensee took immediate corrective actions to address the issue, conducted a root cause evaluation, and developed corrective actions to address the root causes, contributing causes and extent of condition associated with this finding.

The finding was more than minor because it affected the Mitigating Systems attributes of equipment performance availability and reliability, and maintenance procedure quality, as well as the Mitigating Systems Cornerstone objective of ensuring the availability and reliability of systems. The inspectors determined this finding was not a design qualification deficiency resulting in a loss of function per Generic Letter 91-18, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk-significant due to a seismic, fire, flooding, or severe weather initiating event. Therefore, the finding was considered to be of very low safety significance (Green). The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee failed to ensure that procedures were adequate and accurate to assure nuclear safety

Inspection Report# : [2008003](#) (*pdf*)

Significance:  Dec 31, 2007

Identified By: NRC

Item Type: FIN Finding

Failure to Adequately Assess Operability of Service Water Pump P-32C

A self-revealed finding with no associated violation of regulatory requirements was identified for an inadequate operability evaluation performed in June 2007 for service water pump P-32C. Specifically, the pump failed its

inservice test (IST) on high vibrations after approximately six hours of operation, but the operability evaluation had concluded the pump vibrations would not reach the out-of-service limit until after 120 hours of continuous operation. Contributing to the unanticipated early failure was the use of non-conservative decision-making and the use of a non-conservative assumption in the pump's vibration prediction model. The licensee entered this issue into its corrective action program and P-32C was subsequently repaired and returned to service.

The finding is more than minor because it could reasonably be viewed as a precursor to a significant event. The finding is of very low safety significance (Green) because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the Technical Specification (TS) allowed outage time, and no risk due to external events. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance. Specifically, the licensee failed to use conservative assumptions in decision-making affecting operability of safety-related equipment (H.1(b)).

Inspection Report# : [2007005](#) (pdf)

Significance:  Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Operability Evaluations for Turbine-Driven Auxiliary Feedwater Pump 2P-29

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to adequately assess operability of the Unit 2 2P-29 turbine-driven auxiliary feedwater (TDAFW) pump. The licensee failed to implement procedural requirements regarding the immediate assessment of operability on September 24 and September 27, 2007, for the increased water ingress into the turbine outboard bearing housing for the pump following maintenance activities. The licensee took corrective actions, which included performing an operability evaluation on November 1 when the next scheduled test again revealed higher than normal levels of water in the bearing oil. However, the inspectors continued to identify, in the subsequent revisions to the operability determination, that the licensee failed to utilize all the data available to assess pump operability. At the end of the inspection period, the licensee continued to evaluate the causes and corrective actions to address this finding.

The finding is more than minor because, if left uncorrected, the failure to properly assess operability would result in the TDAFW pump being degraded, and possibly inoperable for more than the allowed outage time in accordance with TSs with no action being taken. The finding is of very low safety significance (Green) because the inadequate operability determination did not result in exceeding the allowed outage time of TSs before action was taken. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance. Specifically, the licensee failed to use conservative assumptions in decision-making affecting operability of safety-related equipment (H.1(b)).

Inspection Report# : [2007005](#) (pdf)

Significance:  Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Have Adequate Procedures for the Refueling Water Storage Tank

A self-revealed finding and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," were identified for the failure to have adequate procedures to allow operators to properly set the thermostat of the Unit 2 refueling water storage tank (RWST) heaters and to ensure the RWST was recirculated frequently enough for the temperature indicator to accurately measure bulk temperature. On September 18, 2007, the Unit 2 RWST was found to be at 105 °F. This temperature exceeded the TS-maximum allowable limit of 100 °F (97 °F parametric) and could not be restored to acceptable limits before the eight-hour TS action statement expired. As a result, a shutdown of Unit 2 was commenced. At 20 percent power, a return to full power began after the RWST temperature was restored to within acceptable limits. It was later identified that the undesired heat-up was caused by the incorrect setting of the controlling thermostat for the RWST heaters.

The finding is more than minor because it is associated with the procedure quality and human performance attributes of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The

finding is of very low safety significance (Green) because the elevated temperature of the RWST and subsequent shutdown sequence did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance. Specifically, human error prevention techniques were not utilized prior to and during the thermostat setting task and personnel proceeded in the face of uncertainty and unexpected circumstances (H.4(a)).

Inspection Report# : [2007005 \(pdf\)](#)

Significance:  Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Adequate Post-Maintenance Testing for the Turbine-Driven Auxiliary Feedwater Pumps

The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to conduct adequate post-maintenance testing of the Unit 1 1P-29 turbine-driven auxiliary feedwater (TDAFW) pump following a ten-year overhaul of the turbine in May 2007. Specifically, the ten-year overhaul maintenance included bearing replacement, but the TDAFW pump was not run long enough during testing for bearing temperature to stabilize. The appropriate post-maintenance test would have detected that the bearing temperatures were rising and required evaluation prior to declaring the TDAFW pump operable. The licensee entered the issue into its corrective action program and took immediate corrective actions. Additionally, the licensee initiated changes to the inadequate procedures.

The finding is more than minor because, if left uncorrected, the issue would have become a more significant safety concern. The inspectors determined this finding was not a design qualification deficiency resulting in a loss of function per NRC Generic Letter 91-18, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk-significant due to a seismic, fire, flooding, or severe weather initiating event. Therefore, the finding is considered to be of very low safety significance (Green). Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance. Specifically, the licensee failed to ensure that procedures were adequate and accurate to assure nuclear safety (H.2(c)).

Inspection Report# : [2007005 \(pdf\)](#)

Significance:  Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Evaluate a Condition Adverse to Quality Associated with Turbine-Driven Auxiliary Feedwater Pump 2P-29

The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to implement prompt corrective actions for the degraded oil conditions initially identified with the Unit 2 2P-29 turbine-driven auxiliary feedwater (TDAFW) pump on September 24, 2007, following maintenance. Following an additional oil sample with favorable results, the licensee incorrectly concluded, due to confirmational biases, that the high water content of the first oil sample was an expected condition. The licensee wrote a condition report, but it was closed with no actions taken. In November 2007, the licensee identified that a significant degraded oil condition existed with the pump. The licensee entered the issue into its corrective action program and took immediate corrective actions, including rebuilding the pump turbine. The licensee continued to evaluate the causes and corrective actions to address this finding at the end of the inspection period.

The finding is more than minor because it could reasonably be viewed as a precursor to a significant event. Specifically, the failure to correct the cause of the oil degradation in a timely manner in September 2007 could have resulted in the failure of the 2P-29 TDAFW pump. The finding is of very low safety significance (Green) because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the TS allowed outage time, and no risk due to external events. Additionally, the inspectors determined that the finding had a cross-cutting area aspect in the area of problem identification and resolution. Specifically, the licensee failed to thoroughly evaluate the problem with water ingress into the oil, such that a resolution addressed the cause and extent of condition (P.1(c)).

Inspection Report# : [2007005 \(pdf\)](#)

Significance:  Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Provide Adequate Guidance to Ensure the Operability of the Main Steam System During a Steam Generator Tube Rupture

The inspectors identified a Non-Cited Violation (NCV) of Technical Specification 5.4, "Procedures," for the failure to have adequate procedures to ensure the continued operation of the steam dumps to the condenser to maintain a Reactor Coolant System (RCS) cooldown during a Steam Generator Tube Rupture (SGTR) event. Specifically, the procedures permitted the operators to lock in a Safety Injection (SI) signal and then reset SI more than once, which could cause an automatic closure of the Main Steam Isolation Valves (MSIVs) and a loss of steam dump to the condenser, which could result in a delay in terminating the Primary-To-Secondary Leakage. The licensee has initiated procedure change requests to the SGTR emergency operating procedures as a corrective action for this finding.

This finding was more than minor because it was associated with the attribute of procedure quality, which affected the mitigating systems cornerstone objective of ensuring the availability and reliability of the Main Steam (MS) system to respond to initiating events to prevent undesirable consequences. Steam dump to the condenser is the preferred means of cooling the RCS during a SGTR because it minimizes radiological releases, conserves feedwater, and provides the most rapid cooldown capability. The finding is of very low safety significance based on the results of the SDP Phase 1 screening worksheet. The inspectors concluded that this finding was cross-cutting in the area of human performance, resources (H.2(c)), in that the licensee failed to have complete, accurate, and up-to-date procedures for the response to a SGTR event. This item was described in NRC Inspection Report 2007301, dated August 21, 2007, as Item Numbers 05000266/2007301-01 and 05000301/2007301-01.

Inspection Report# : [2007005](#) (*pdf*)

Significance:  Dec 14, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Incorrect Factor of Safety Specified in Design Evaluation of Unit 1 SGBD HX Platform

The inspectors identified an NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," that was of very low safety significance involving a calculation that designed the Unit 1 Steam Generator Blowdown (SGBD) Heat Exchanger (HX) Platform to withstand a load from a postulated pipe whip of the condensate return line resulting from a High-Energy Line Break (HELB). The load from a postulated pipe whip applied to the platform was evaluated in calculation PBNP-994-10-S01, "SGBD HX Platform Mod. For Addition of Pipe Rupture Restraint for Condensate Return Line" which was approved on April 28, 2007. As a result of this calculation, the design function of the Unit 1 SGBD HX Platform was revised to hold and maintain the steam generator blowdown heat exchangers and condensate return line in position and assure that the platform did not fall onto the safety related Refueling Water Storage Tank (RWST) during a safe shutdown earthquake and a HELB simultaneously. Specifically, the licensee failed to correctly use the original design anchor bolt safety factor in the supporting calculation. This issue was entered into the licensee's corrective action program as condition report CAP 1118144.

The issue was more than minor because the calculation error would be expected to necessitate extensive calculation rework and possibly a modification in order to demonstrate that the platform meets design acceptance limits commensurate with those applied to original design. The finding screened as having very low safety significance (Green) because the inspectors answered "yes" to question 1 under the Mitigating Systems Cornerstone column of the Phase 1 worksheet. Specifically, the platform remained "operable but degraded". The cause of the finding was related to the cross-cutting element in Human Performance, Work Practices because the licensee did not ensure supervisory and management oversight of work activities, including contractors, such that nuclear safety is supported (item H.4(c) of IMC 0305). The licensee had failed to correctly use the original design anchor bolt safety factor in all three revisions of the design basis calculation.

Inspection Report# : [2007007](#) (*pdf*)

Significance:  Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Service Water System Microbiologically-Induced Corrosion through-Wall Leak Due to Inadequate Corrective

Actions

A self-revealing finding and associated NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified for the failure to take prompt corrective action for microbiologically-induced corrosion (MIC) of the service water (SW) piping. Specifically, the SW Inservice Inspection Program failed to identify SW pipe thinning prior to MIC causing a through-wall leak because the non-destructive examination method used, specifically radiography, was inadequate for detecting MIC. The limited ability for identifying MIC with radiography was a known problem and was previously documented in the licensee's corrective action program in 2005; however, prompt corrective actions were not taken. For the 2007 leak, the licensee took immediate corrective actions to replace the leaking SW pipe and proposed changes to the SW Inservice Inspection Program that would enhance the site's ability to identify potential sources of MIC in the SW system and correct the program issues initially identified in 2005.

The issue is greater than minor because it is associated with the equipment performance attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. In addition, if left uncorrected, the finding would become a more significant safety concern. The finding is of very low safety significance (Green) because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the Technical Specification (TS) allowed outage time, and no risk due to external events. Additionally, the inspectors determined that the primary cause of the finding is related to the cross-cutting area of problem identification and resolution. Specifically, under the component of corrective action program, the licensee failed to take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance and complexity

Inspection Report# : [2007004](#) (pdf)

Significance:  Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Correct Previous Indication of Degraded Oil in Component Cooling Water Pump

The inspectors identified an NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to implement prompt corrective actions for the degraded oil conditions initially identified with safety-related Component Cooling Water (CCW) Pump 1P-11B in March 2007. Following an additional oil sample with anomalous results in July 2007, the licensee declared the pump inoperable and performed troubleshooting and repair of CCW Pump 1P-11B. The licensee entered the issue into their corrective action program and took immediate corrective actions. The licensee continued to evaluate the causes and corrective actions to address this finding at the end of the inspection period.

The finding is greater than minor because it could reasonably be viewed as a precursor to a significant event. Specifically, the failure to promptly correct the cause of the oil degradation in a timely manner in March 2007 could have resulted in the failure of the CCW pump. Additionally, the finding is associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance (Green) because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the TS allowed outage time, and no risk due to external events. Additionally, the inspectors determined that the primary cause of the finding is related to the cross-cutting area of problem identification and resolution. Specifically, under the component of corrective action program, the licensee failed to take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance and complexity

Inspection Report# : [2007004](#) (pdf)

Significance:  Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Incorrect Calibration Methods for Engineered Safeguards Actuation System Instrumentation, Lead/Lag Time Constants for Steam Line Pressure

A self-revealing finding and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for the failure to have adequate maintenance procedures for performing calibration of the Engineered Safeguards Feature Actuation System (ESFAS) instrumentation steam pressure compensator modules. Specifically, instructions were not correct or sufficiently detailed to determine mathematical values from graphical

displays of circuit output used in performing the subject calibrations.

The finding is greater than minor because it is associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the TS allowed outage time, and no risk due to external events. The inspectors also determined that the primary cause of this finding is related to the cross-cutting area of human performance. Specifically, under the component of resources, the licensee failed to ensure complete, accurate and up-to-date procedures for calibration of the ESFAS instrumentation steam pressure compensator modules

Inspection Report# : [2007004](#) (*pdf*)

Significance:  Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Account for MOV Stalling Delays for ECCS Response Time Analysis

Inspection Report# : [2007004](#) (*pdf*)

Significance:  Jul 13, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Promptly Correct Non-Compliant Sprinkler Heads in the EDG Rooms

The inspectors identified a finding of very low safety significance and an associated NCV of the PBNP's Operating License for failure to take prompt corrective action for a condition adverse to quality. Specifically, in July 2002, the licensee identified that four sprinkler heads located in Fire Zones 308 and 309 (i.e., emergency diesel generator (EDG) rooms G-01 and G-02, respectively) were not in compliance with the NFPA 13-1966 Code, Section 3066. The violation was entered into the licensee's CAP as 01101421, "Untimely Corrective Actions," dated July 12, 2007, to increase the priority of the modification that was to correct the sprinkler heads' non-compliant condition. The finding has a cross-cutting aspect in the area of problem identification and resolution because the licensee did not take appropriate corrective action to address the safety issue in a timely manner commensurate with its safety significance and complexity.

This finding was more than minor because the finding was associated with the protection against external factors (i.e., fire) attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the licensee's failure to promptly correct the lack of return bends condition for four sprinkler heads in the EDG rooms and take appropriate action to restore the operability of these sprinkler heads in a timely manner could have affected the suppression capability of the fire suppression systems in these rooms. The finding was of very low safety significance based on a Phase 2, SDP evaluation completed in accordance with IMC 0609, Appendix F, "Fire Protection Significance Determination Process." (Section 1R05.4b)

Inspection Report# : [2007006](#) (*pdf*)

Significance: N/A Jul 13, 2007

Identified By: NRC

Item Type: FIN Finding

Failure to Meet Separation Requirements for Redundant Trains

The inspectors identified a violation of 10 CFR Part 50, Appendix R, Section III.G.2, involving the licensee's failure to ensure, in the event of a severe fire, that one redundant train of systems necessary to achieve and maintain hot shutdown (HSD) conditions was free of fire damage. Specifically, in the event of a severe fire in Fire Zone 151 in Fire Area A02, the licensee failed to ensure that cables and/or circuits of one redundant train of charging pumps were adequately protected by a 20-foot separation with no intervening combustibles. The violation was entered into the licensee's corrective action program (CAP) as 01101444, "Compliance with Appendix R, Section III.G.2 in Fire Zone 151," dated July 12, 2007. The licensee initiated compensatory measures and will evaluate the violation during transition to NFPA 805. The inspectors determined there was no cross-cutting aspect to this finding.

This finding was more than minor because the finding was associated with the equipment performance attribute of the

Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the licensee's failure to ensure that cables and/or circuits of one redundant train of charging pumps were adequately protected, by maintaining a 20-foot separation with no intervening combustibles, left the charging pumps' cables and/or circuits vulnerable to fire damage and did not ensure the availability and reliability of systems that respond to initiating events. Because the NRC-identified violation was a circuit-related finding that was not associated with a finding of high safety significance (Red), the inspectors evaluated the violation in accordance with the four criteria established by Section A of the NRC's Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues (10 CFR Part 50.48) for a licensee in NFPA 805 transition. The inspectors determined that for this violation: (1) the licensee would have identified the violation during the scheduled transition to 10 CFR Part 50, Section 48(c); (2) the licensee had established adequate compensatory measures within a reasonable time frame following identification and would correct the violation as a result of completing the NFPA 805 transition; (3) the violation was not likely to have been previously identified by routine licensee efforts; and (4) the violation was not willful. As a result, the inspectors concluded that the violation met all four criteria established by Section A, and the NRC is exercising enforcement discretion to not cite this violation in accordance with the NRC's Enforcement Policy. (Section 1R05.2b.1)
Inspection Report# : [2007006](#) (pdf)

Barrier Integrity

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain Control of Containment Penetration Status

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to maintain adequate control over the status of containment penetrations during the Unit 2 core reload evolution. Specifically, the licensee failed to adequately track the open and closed status of two isolation valves, such that, an unexpected pathway from containment to the atmosphere existed. The containment closure checklist indicated that the valves were closed and secured; however, they were in fact open during a period of fuel movement inside containment. At the end of the inspection period, the licensee continued to perform a causal evaluation and develop additional long term corrective actions.

The finding was more than minor because the failure to maintain the accuracy of the containment closure checklist affected the Barrier Integrity Cornerstone attribute of Configuration Control and affected the cornerstone objective of providing reasonable assurance that physical design barriers, such as containment, protect the public from radionuclide releases caused by accidents. Specifically, in the event of a fuel handling accident inside containment, the unknown position of these two vent valves could have resulted in the inability to restore containment closure in a timely manner. In accordance with IMC 0609, App G, "Shutdown Operations Significance Determination Process," the inspectors determined that the finding was of very low safety significance (Green) because at the time that the open pathway existed, the fuel being reloaded into the core had not recently (within the previous 65 hours) been irradiated in a critical core, and because of the relatively small diameter of the pathway. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance in that the licensee failed to use conservative assumptions in decision making

Inspection Report# : [2008003](#) (pdf)

Significance:  Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Take Prompt Corrective Actions for Conditions Adverse to Quality Associated with the PAB Crane

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," for the license's failure to implement prompt corrective actions for the degraded conditions initially identified with the single failure proof primary auxiliary building crane by maintenance personnel on January 17, 2008. As a result, on March 4, while a new fuel storage canister was being

lowered in a laydown area after traversing the width of the spent fuel pool, the crane failed to the safe position with the load suspended approximately one foot off the floor. In a review of work order and corrective action history, the inspectors determined that all of the degraded conditions from January were not corrected during maintenance on February 21. The licensee entered the issue into its corrective action program and took immediate corrective actions, including repair of the crane. The licensee continued to evaluate the causes and corrective actions to address this finding at the end of the inspection period.

The finding is more than minor because it could reasonably be viewed as a precursor to a significant event. Specifically, the failure to correct the degraded condition of the primary auxiliary building crane resulted in the failure of the single failure proof crane while in use to move loads over the spent fuel pool. The finding affected the Barrier Integrity Cornerstone and is of very low safety significance (Green) because this spent fuel pool issue did not result in the loss of spent fuel pool cooling, did not result in damage to fuel clad integrity in the spent fuel pool, and did not result in a loss of spent fuel pool inventory. This finding has a cross cutting aspect in the area of problem identification and resolution because the licensee did not take appropriate corrective actions in a timely manner, commensurate with their safety significance and complexity.

Inspection Report# : [2008002](#) (*pdf*)

Significance:  Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Piping Anchor Design not in Conformance with Design Basis Code Requirements

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to evaluate service water piping to pipe anchor integral welded attachments in conformance with the design requirements of the design basis American Society of Mechanical Engineers Boiler and Pressure Vessel Code. The licensee entered this issue into its corrective action program.

This finding is more than minor because it's associated with the design control attribute of the Barrier Integrity Cornerstone and affected the cornerstone objective to maintain the structural integrity of the service water system, structures, and components and the operational capability of the containment fan coolers. The finding was of very low safety significance (Green) based on a Phase 1 screening in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," and Appendix H, "Containment Integrity Significance Determination Process," because pressurized water reactor containment fan coolers impact late containment failure and source terms, but not large early release frequency. There was not a cross-cutting aspect to this finding.

Inspection Report# : [2008002](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Adequate Total Effective Dose Equivalent ALARA Evaluations

The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation of 10 CFR 20.1501 for the failure to perform an adequate survey (evaluation) to determine the use of respiratory protection equipment and/or engineering controls so as to maintain the total effective dose equivalent (TEDE) As-Low-As-Is-Reasonably-Achievable (ALARA). Specifically, TEDE ALARA evaluations completed in April 2008 prior to SG maintenance and maintenance support activities did not adequately assess the planned use of engineering controls to reduce the concentration of radioactive material in air. As a result, respirators were specified to be used when not

warranted. As corrective actions, the licensee planned to reevaluate its TEDE ALARA evaluations for pending SG work activities, planned to develop a procedure specific to the performance of these evaluations, and was considering the need for supervisory or health physics staff review of these evaluations. The licensee entered the issue into its corrective action program as action request (AR) 01125284.

The finding is more than minor because it impacted the program and process attribute of the Occupational Radiation Safety Cornerstone and potentially affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation, in that not performing adequate evaluations to determine the use of respiratory protection equipment consistent with the engineering controls for the work would result in additional dose to workers. The finding was determined to be of very low safety significance because it was not an ALARA planning issue, there was no overexposure nor potential for overexposure, and the licensee's ability to assess dose was not compromised. The finding was determined to have a cross-cutting aspect in the resource component of the Human Performance area, because procedures were not adequate to ensure that TEDE ALARA evaluations were performed properly
Inspection Report# : [2008003](#) (*pdf*)

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Ensure Completion of New Supervisory Training

The inspectors identified a Non-Cited Violation (NCV) of Confirmatory Order EA 06-178 having very low safety significance (Green) for the licensee's failure to ensure that new employees holding supervisory positions and higher were trained on safety conscious work environment (SCWE) principles within nine months of their hire dates, unless they have had the same or equivalent SCWE training within the previous two years of the hire dates. Specifically, the inspectors identified that four new employees holding supervisory positions for greater than nine months of their hire dates as supervisors, had not received SCWE training, nor the same or equivalent training within the previous two years. At the end of the inspection period, the licensee was performing a causal analysis and developing corrective actions to address the issues identified by the inspectors.

The inspectors concluded that the finding is more than minor because if left uncorrected the finding would become a more significant safety concern. The finding would have been greater than very low significance had an action by the new supervisor resulted in a violation of 10 CFR Part 50.7 against an employee. The finding is not suitable for Significance Determination Process evaluation, but has been reviewed by NRC management and is determined to be a finding of very low safety significance. The inspectors determined that the finding had a cross-cutting area aspect in the area of human performance. Specifically, the licensee failed to ensure that supervisory and management oversight of the Confirmatory Order actions, such that nuclear safety was supported

Inspection Report# : [2008003](#) (*pdf*)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: FIN Finding

Inadequate Corrective Actions to Address Licensee Action Plans

The inspectors identified a finding of very low safety significance (Green) for the failure to take timely and effective corrective actions to address four of the nine nuclear safety culture action plans and the quick hitter plans.

Specifically, the licensee developed the action plans and quick hitter plans in response to the Confirmatory Order in the first quarter of 2007, to correct long standing safety culture issues identified by the licensee's comprehensive safety culture assessments conducted in 2004 and 2006. At the end of the inspection period, the licensee was performing a causal analysis and developing corrective actions to address the issues identified by the inspectors.

The finding is more than minor because if left uncorrected the finding would become a more significant safety concern. The finding would have been greater than very low significance had the failure to take corrective actions resulted in a more safety significant issue as a result of the incomplete action plans. The finding is not suitable for Significance Determination Process evaluation, but has been reviewed by NRC management and is determined to be a finding of very low safety significance. The inspectors determined that the finding had a cross-cutting area aspect in the area of problem identification and resolution. Specifically, the licensee failed to take appropriate corrective actions to address safety issues in a timely manner, commensurate with their safety significance and complexity

Inspection Report# : [2008003](#) (pdf)

Significance: SL-IV Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate 10 CFR 72.48 Screening to Evaluate Possible Thermal Effects on Fuel Cladding

The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation of 10 CFR 72.48(c)(1) for the licensee's failure to obtain a Certificate of Compliance (CoC) amendment pursuant to 10 CFR 72.244, for changes made in the spent fuel storage cask operating procedures during the 2004 loading campaign as described in the Final Safety Analysis Report. The procedure changes constituted a change in the terms, conditions, or specifications incorporated in the CoC. Although the procedures were contained in the Final Safety Analysis Report, the licensee failed to identify that TS 1.2.17a, "32PT Dry Storage Canister (DSC) Vacuum Drying Duration Limit," was also affected by the procedure change and required prior NRC approval. The licensee implemented corrective actions, which included revising the loading procedure to reflect the sequence described in the FSAR prior to the next cask loading campaign.

This finding is more than minor because it had the potential to impact the NRC's ability to perform its regulatory function, since the licensee failed to receive NRC approval for a change in this licensed activity. The inspectors determined that the finding was not suitable for SDP evaluation because the noncompliance involved 10 CFR Part 72 dry fuel storage activities. Therefore, this finding was reviewed by regional management and dispositioned using traditional enforcement. The finding was determined to be of very low safety significance.

Inspection Report# : [2007005](#) (pdf)

Significance: N/A Dec 31, 2006

Identified By: NRC

Item Type: AV Apparent Violation

NRC to Review Items in Confirmatory Order Dated January 3, 2007, for Employment Discrimination Settlement.

In a letter dated January 3, 2007 (ADAMS Accession Number ML063630336), the NRC issued a Confirmatory Order to the licensee as part of a settlement agreement through the NRC's Alternative Dispute Resolution (ADR) process. The NRC investigated an alleged violation of 10 CFR 50.7, "Employee Protection," to determine whether a senior reactor operator was the subject of retaliation for raising a nuclear safety concern in the licensee's corrective action program. This issue was resolved through the NRC's ADR program and will be tracked as Apparent Violation (AV) 05000266/2006013-05; 05000301/2006013-05 pending NRC review of the licensee's completion of items specified in the Confirmatory Order.

NOTE: All of the specific items from this AV are also tracked as ORDER items in RPS/IR.

Inspection Report# : [2006013](#) (pdf)

Inspection Report# : [2008003](#) (pdf)

Last modified : August 29, 2008

Point Beach 2

3Q/2008 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: FIN Finding

Failure to Properly Store or Secure Tornado Missile Hazards in the Protected Area

The inspectors identified a finding of very low safety significance (Green) with no associated violation of regulatory requirements for the licensee's failure to maintain control over the proper storage and placement of materials within the protected area that were classified as tornado hazards per station Procedure PC 99. Specifically, these unsecured items were identified near the Unit 1 and Unit 2 main and auxiliary transformers, as well as the switchyard boundary. Once notified, the licensee entered the issue into its corrective action program and removed or secured the materials appropriately. At the end of the inspection period, the licensee continued to perform a causal evaluation and develop additional long term corrective actions.

The finding is more than minor because if left uncorrected, the loose items would become a more significant safety concern. The finding is of very low safety significance (Green) because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of problem identification and resolution in that the licensee failed to take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance

Inspection Report# : [2008003](#) (*pdf*)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: FIN Finding

Failure to Implement Appropriate Design and Configuration Control for the Unit Polar Crane

A self-revealed finding of very low significance (Green) with no associated violation of regulatory requirements was identified for the failure to implement appropriate design and configuration control for the Unit 2 polar crane upgrade project, which resulted in issues associated with reliable operation of the polar crane during the first reactor vessel head lift. Specifically, a lack of configuration control on the crane radio system resulted in a loss of radio communications during the initial reactor vessel head lift over the reactor vessel head stand, which resulted in unreliable crane operation. The licensee implemented remedial corrective actions to address the design issues with the polar crane bridge drive motors which resulted in unavailability at the beginning of the outage and ensured the radio receivers were appropriately configured and installed. The licensee performed a root cause analysis to determine the cause of the design and configuration control issues associated with the polar crane and developed additional corrective actions to address this performance deficiency.

The finding is more than minor because it is associated with the design control attribute of the Initiating Events Cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The finding is of very low safety significance (Green) because the finding did not meet the criteria for a Phase 2 or Phase 3 Analysis, as specified in IMC 0609 Appendix G, Attachment 1, Checklist 1, "Pressurized Water Reactor Hot Shutdown Operation: Time to Core Boiling < 2 Hours." The inspectors did not identify a cross-cutting aspect associated with this finding.

Inspection Report# : [2008003](#) (*pdf*)

Significance:  Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Take Prompt Corrective Actions for Recurring Cold Weather Issues

The inspectors identified a finding and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," having very low safety significance (Green) for the licensee's failure to take prompt corrective actions to address recurring cold weather issues in the facade building which again occurred in January 2008. The failure to take prompt corrective actions led to the formation of ice on offsite power and plant equipment cable trays and cabling, which supplied offsite power to both Units' busses. The sheets of ice were also in proximity to the Unit 2 refueling water storage tank level indicators and outlet piping. The licensee initiated condition reports, took immediate corrective actions, and was performing a causal evaluation at the end of the inspection period.

The finding is more than minor because if left uncorrected the finding would become a more significant safety concern in that the formation of ice in the facade building in this case could have affected safety related equipment. Because the ice buildup in the Unit 2 facade was an external factor and transient initiator contributor that did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available, the finding is considered to be of very low safety significance (Green). This finding

has a cross-cutting aspect in the area of problem identification and resolution because the licensee did not take appropriate corrective actions in a timely manner, commensurate with their safety significance and complexity.

Inspection Report# : [2008002](#) (*pdf*)

G

Significance: Dec 31, 2007

Identified By: NRC

Item Type: FIN Finding

Failure to Control Loose Materials Classified as Tornado Hazards

The inspectors identified a finding of very low safety significance with no associated violation of regulatory requirements for the licensee's failure to control loose materials in the protected area. Specifically, the inspectors identified materials that were classified as tornado hazards per station procedure PC 99 near the Unit 1 and Unit 2 main and auxiliary transformers and the switchyard boundary. Once notified, the licensee entered the issue into its corrective action program and removed the materials. In addition, a procedure change request was initiated to incorporate tornado hazard walkdowns into the abnormal operating procedure for severe weather response.

The finding is more than minor because if left uncorrected, the loose items would become a more significant safety concern. The finding is of very low safety significance (Green) because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of problem identification and resolution in that the licensee failed to take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance and complexity (P.1(d)).

Inspection Report# : [2007005](#) (*pdf*)

Mitigating Systems

G

Significance: Sep 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50 , Appendix B, Criterion V NCV for the Failure to have Adequate Maintenance Procedures for Service Water Pump Replacements

. A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the failure to properly rig and install the P-32E service water pump shaft on June 7, 2006. The bent pump shaft subsequently led to high pump vibrations and pump inoperability in excess of Technical Specification Action Condition completion time in February 2008. Specifically, the licensee determined that Routine Maintenance Procedure (RMP), RMP 9216-2, "Service Water Pump Removal, Installation, and Maintenance," lacked adequate installation and rigging instructions to ensure excessive force was not applied to the shaft during installation. As part of its corrective actions, the licensee revised the RMP to include proper installation and rigging instructions.

The finding was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of equipment performance, and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Tables 3b and 4a for the Mitigating Systems Cornerstone. The inspectors determined that the finding was of very low safety significance (Green) because the finding did not involve a design or qualification deficiency, there was no actual loss of safety function, no single train loss of safety function for greater than the technical specification allowed outage time, and no risk due to external events. The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance, resources component, because licensee procedures were not complete or adequate to ensure that the P-32E pump shaft was rigged and installed without damage to the shaft.

Inspection Report# : [2008004](#) (*pdf*)

G

Significance: Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Equalizing Charge Voltage Not Bounded by Battery Room Hydrogen Generation Calculation

Green. A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion III, ADesign Control,@ was identified by the team for the failure to ensure that the design limit established in a design basis calculation, used to determine SR batteries hydrogen generation rate, bounded the value used in a maintenance procedure for a safety related component. During the inspection, the licensee evaluated and determined that the effect of the higher hydrogen gas generation did not have an impact on the operability of the batteries and the ventilation system.

The finding was greater than minor because the lack of adequate design control process resulted in increase of hydrogen generation levels and in a reasonable doubt of operability of the 125Vdc system. The finding was determined to be of very low significance, because it was a design deficiency that did not result in actual loss of safety function. This finding does not have a cross-cutting aspect because it is not indicative of current performance.

Inspection Report# : [2008009](#) (*pdf*)

G

Significance: Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Conservative Design Basis for Primary Auxiliary Building Heat-up

• Green. A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, A Design Control, @ was identified by the team for the failure to verify the accuracy of design using alternative or simplified calculational methods or by the performance of a suitable testing program. Specifically, the licensee used non-conservative field test data as a basis for the design temperatures given in the equipment qualification (EQ) manual for components in the Primary Auxiliary Building (PAB), resulting in specified design temperatures for some safety related components that may be as much as approximately 40 oF less than calculated worst case accident condition temperatures. The licensee re-evaluated the consequences of the higher temperatures and concluded the equipment remained operable.

The finding was determined to be more than minor because, if the EQ design temperatures were left uncorrected, this deficiency could lead to inadequately qualified replacement parts or inadequately designed plant modifications in the future. The finding was determined to be of very low significance because, by the end of the inspection, the

licensee was able to show that all affected components were capable of performing their safety related functions under the higher than previously anticipated temperatures. The team did not identify a cross-cutting aspect associated with this finding.

Inspection Report# : [2008009](#) (*pdf*)

G

Significance: Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Ability to Transfer Fuel Oil between EDG Fuel Oil Tanks T-175A/B has not been demonstrated by Testing

• Green. A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XI, A Test Control, @ was identified by the team for the failure to test the components used for transfer of fuel oil between two underground storage tanks that support EDG operation. Specifically, the licensee has not demonstrated the transfer of fuel between tanks T-175A and T-175B as credited in the Technical Specification (TS) Basis and UFSAR. The licensee entered this issue into its corrective action and prepared to test these components.

This finding was determined to be more than minor because the failure to verify the transfer capability affected the ability to ensure emergency power availability for greater than two days. This finding was screened as very low safety significance because it was a deficiency that did not result in the loss of safety function. This finding does not have a cross-cutting aspect because it was not indicative of current performance.

Inspection Report# : [2008009](#) (*pdf*)

G

Significance: Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

RHR Pump Suction Pressure Gages Repeatedly Found To Be Out Of Tolerance

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XII, A Control of Measuring and Test Equipment, @ was identified by the team for the failure to correct a known trend of out of tolerance (OOT) test pressure gauge which were used in a critical In Service Test (IST) Program performance test of the residual heat removal (RHR) pumps for Units 1 and 2. The licensee entered this issue into its corrective action and confirmed operability of the RHR pumps.

The finding was determined to be more than minor because, if left uncorrected, it could become a more significant safety concern. Specifically, since the cause of the high frequency OOT conditions for these pressure gauges has not been identified, it could be assumed that this instrumentation could be out of tolerance in a non-conservative manner. The finding was determined to be of very low significance because the comprehensive IST performance test conducted during the 2008 refueling outage showed that the actual test results were within the acceptable band, thereby confirming that operability and functionality of the RHR pumps had not been lost. This finding has a cross-cutting aspect in the area of Human Performance, Resources because the licensee did not ensure adequate resources were available to minimize long-standing equipment issues. (H.2(a))

Inspection Report# : [2008009](#) (*pdf*)

G

Significance: Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Address Sprinkler Head Obstructions in 'B' Train EDG Rooms

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of License Condition 4.F for the failure to address fire suppression sprinkler head obstructions in the 'B' train emergency diesel generator (EDG) rooms. The inspectors identified that five sprinkler heads were obstructed in the 'B' train EDG rooms. National Fire Protection Association (NFPA) 13-1991, "Installation of Sprinkler Systems" was the applicable standard for sprinkler systems installed in the two rooms. The inspectors determined that failure to address sprinkler head obstructions was contrary to NFPA 13-1991 and was a performance deficiency.

The finding was more than minor because the failure to address sprinkler head obstructions was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Factors (Fire) and affected the cornerstone objective of ensuring the capability of systems that respond to initiating events. Specifically, the identified obstructions to sprinkler heads would affect the sprinkler spray patterns and distribution thereby impacting the sprinkler systems capability to control a fire. In accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," and IMC 0609, Appendix F, "Fire Protection Significance Determination Process," the inspectors considered the finding to represent a moderate degradation of the water based suppression system for both rooms. As such, the inspectors performed a Phase 2 SDP. The inspectors concluded that potential fire scenarios associated with the finding were effectively FDS0 fire scenarios as described in Section 2.2 of IMC 609, Appendix F, and that the issue was of very low safety significance (i.e., Green). The inspectors did not identify a cross-cutting aspect associated with this finding.

Inspection Report# : [2008003](#) (*pdf*)



Significance: Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Manage Online Risk for Breaker 1A52-16C Work

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50.65(a)(4), "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," when the licensee failed to adequately manage the risk associated with work on the 480-VAC Breaker 1B52 16C, coincident with a large number of other out-of-service components, which resulted in an unplanned risk condition for Unit 1 without the appropriate risk management actions. Specifically, the licensee incorrectly assumed that planned work on Breaker 1B52 16C did not render the breaker unavailable, and that the breaker was not utilized in Modes 1, 2, or 3. Consequently, the component was not factored into the Safety Monitor online risk model. However, Breaker 1B52 16C was in fact unavailable and also utilized in abnormal operating procedures for Modes 1, 2 and 3. Therefore, unavailability of the breaker was required to have been factored into Safety Monitor with appropriate risk management actions taken. The licensee took corrective actions to perform an apparent cause evaluation that identified the apparent cause of the issue and recommended a number of corrective actions to address the procedural and human performance deficiencies that were identified.

The finding was greater than minor because the finding was based on incorrect assumptions that changed the outcome of the risk assessment. The inspectors evaluated this finding using the Appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process" worksheets of Manual Chapter 0609 because the finding is a maintenance risk assessment issue. Flowchart 1, "Assessment of Risk Deficit," requires the inspectors to determine the risk deficit associated with this issue. This finding was determined to be of very low safety significance because the incremental core damage probability deficit was less than 1E 6. The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance. Specifically, the licensee failed to use conservative assumptions in decision-making and adopt a requirement to demonstrate that the proposed action was safe in order to proceed rather than a requirement to demonstrate that it is unsafe in order to disapprove the action

Inspection Report# : [2008003](#) (*pdf*)



Significance: Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate procedures for DY-0C Inverter Maintenance

A self-revealing finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for the failure to have appropriate maintenance procedures and work instructions in place to identify improperly installed components prior to the attempted restoration of the DY-0C white channel instrument inverter. Specifically, the routine maintenance procedure did not contain instructions to check for direct current (DC) grounds following maintenance and prior to restoration, which allowed a ground to go undetected and cause a number of unplanned Technical Specification Action Condition (TSAC) entries as well as the unplanned inoperability of the G 01 and G 02 EDGs and the 2PI 9046 Containment Pressure Indicator. At the end of the inspection period, the licensee continued to perform a causal evaluation and develop additional long term corrective actions.

The finding was more than minor because it is associated with the Procedure Quality attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors evaluated the finding using IMC 0609, Appendix A, Attachment 1, "Significance Determination of Reactor Inspection Findings for At-Power Situations," dated January 10, 2008. The inspectors determined that the finding was of very low safety significance (Green) because the finding did not involve a design or qualification deficiency, there was no actual loss of safety function, no single train loss of safety function for greater than the technical specification (TS) allowed outage time, and no risk due to external events. The inspectors also determined that the finding had a cross-cutting aspect in the area of human performance. Specifically, procedures were not complete or adequate to ensure that installation errors would be detected prior to restoration of the DY-0C

inverter

Inspection Report# : [2008003](#) (pdf)

G

Significance: Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedures for Reduced Inventory with an Intact Reactor Coolant System

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of TS 5.4.1, "Procedures," for the failure to implement operations procedures to remain above the ¾ pipe level indications for draining the RCS while in reduced inventory. Specifically, during the second planned orange risk condition of the Unit 2 refueling outage to facilitate removal of the SG nozzle dams, operators drained the RCS below the procedurally required 22 percent level, as indicated by the most conservative reactor vessel level indication. The licensee took immediate corrective actions to address the issue and was performing a causal evaluation and developing corrective actions at the end of the assessment period.

The finding is more than minor because it is associated with the human performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance (Green) because the finding did not meet the criteria for a Phase 2 or Phase 3 Analysis, as specified in IMC 0609 Appendix G, Attachment 1, Checklist 3, "PWR Cold Shutdown Operation RCS Open and Refueling Cavity Level <23' or RCS Closed and No Inventory in Pressurizer Time to Boiling < 2 hours." The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance. Specifically, the licensee failed to use conservative assumptions in decision-making and adopt a requirement to demonstrate that the proposed action was safe in order to proceed rather than a requirement to demonstrate that it is unsafe in order to disapprove the action

Inspection Report# : [2008003](#) (pdf)

G

Significance: Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain RCS within Procedurally Allowed level During Reduced Inventory

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of TS 5.4.1, "Procedures," for the failure to protect all of the safety equipment necessary for safe shutdown while in reduced inventory with the reactor coolant system (RCS) intact. Specifically, the licensee failed to ensure that an auxiliary feedwater source and steam generator (SG) were available for decay heat removal when a reduced inventory condition was entered and the RCS was intact. The licensee's responses to Generic Letter 88-17, "Loss of Decay Heat Removal," indicated that the first drain of the RCS to reduced inventory following shutdown could be accomplished with the RCS intact and reflux cooling (with a SG and auxiliary feedwater source) as an alternate decay heat removal path. The licensee was performing a causal evaluation and developing corrective actions at the end of the assessment period.

The finding is more than minor because it is associated with the human performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance (Green) because the finding did not meet the criteria for a Phase 2 or Phase 3 Analysis, as specified in IMC 0609 Appendix G, Attachment 1, Checklist 3, "Pressurized-Water Reactor (PWR) Cold Shutdown Operation Reactor Coolant System (RCS) Open and Refueling Cavity Level <23' or RCS Closed and No Inventory in Pressurizer Time to Boiling < 2 hours." The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance. Specifically, the licensee failed to ensure that procedures were adequate and accurate to assure nuclear safety

Inspection Report# : [2008003](#) (pdf)

G

Significance: Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Maintenance Procedure for Turbine-Driven Auxiliary Feedwater Pump 2P-29

The inspectors identified a finding of very low safety significance (Green) and a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to ensure that procedures associated with the maintenance of the turbine for the turbine-driven auxiliary feedwater pump were appropriate to the circumstances. Specifically, the licensee's maintenance procedures did not address the following significant issues: 1) proper application of sealant material used on turbine casing joints; 2) proper cure time of sealant material used on turbine casing joints; 3) prescribed methods for tightening of the oil deflector ring set screw was not discussed; and 4) acceptable clearances between the turbine shaft and the inner diameter of the oil deflector ring were not specified. The licensee took immediate corrective actions to address the issue, conducted a root cause evaluation, and developed corrective actions to address the root causes, contributing causes and extent of condition associated with this finding.

The finding was more than minor because it affected the Mitigating Systems attributes of equipment performance availability and reliability, and maintenance procedure quality, as well as the Mitigating Systems Cornerstone objective of ensuring the availability and reliability of systems. The inspectors determined this finding was not a design qualification deficiency resulting in a loss of function per Generic Letter 91-18, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk-significant due to a seismic, fire, flooding, or severe weather initiating event. Therefore, the finding was considered to be of very low safety significance (Green).

The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee failed to ensure that procedures were adequate and accurate to assure nuclear safety

Inspection Report# : [2008003](#) (*pdf*)

G

Significance: Dec 31, 2007

Identified By: NRC

Item Type: FIN Finding

Failure to Adequately Assess Operability of Service Water Pump P-32C

A self-revealed finding with no associated violation of regulatory requirements was identified for an inadequate operability evaluation performed in June 2007 for service water pump P-32C. Specifically, the pump failed its inservice test (IST) on high vibrations after approximately six hours of operation, but the operability evaluation had concluded the pump vibrations would not reach the out-of-service limit until after 120 hours of continuous operation. Contributing to the unanticipated early failure was the use of non-conservative decision-making and the use of a non-conservative assumption in the pump's vibration prediction model. The licensee entered this issue into its corrective action program and P-32C was subsequently repaired and returned to service.

The finding is more than minor because it could reasonably be viewed as a precursor to a significant event. The finding is of very low safety significance (Green) because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the Technical Specification (TS) allowed outage time, and no risk due to external events. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance. Specifically, the licensee failed to use conservative assumptions in decision-making affecting operability of safety-related equipment (H.1(b)).

Inspection Report# : [2007005](#) (*pdf*)

G

Significance: Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Operability Evaluations for Turbine-Driven Auxiliary Feedwater Pump 2P-29

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to adequately assess operability of the Unit 2 2P-29 turbine-driven auxiliary feedwater (TDAFW) pump. The licensee failed to implement procedural requirements regarding the immediate assessment of operability on September 24 and September 27, 2007, for the increased water ingress into the turbine outboard bearing housing for the pump following maintenance activities. The licensee took corrective actions, which included performing an operability evaluation on November 1 when the next scheduled test again revealed higher than normal levels of water in the bearing oil. However, the inspectors continued to identify, in the subsequent revisions to the operability determination, that the licensee failed to utilize all the data available to assess pump operability. At the end of the inspection period, the licensee continued to evaluate the causes and corrective actions to address this finding.

The finding is more than minor because, if left uncorrected, the failure to properly assess operability would result in the TDAFW pump being degraded, and possibly inoperable for more than the allowed outage time in accordance with TSs with no action being taken. The finding is of very low safety significance (Green) because the inadequate operability determination did not result in exceeding the allowed outage time of TSs before action was taken. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance. Specifically, the licensee failed to use conservative assumptions in decision-making affecting operability of safety-related equipment (H.1(b)).

Inspection Report# : [2007005](#) (*pdf*)

G

Significance: Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Have Adequate Procedures for the Refueling Water Storage Tank

A self-revealed finding and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," were identified for the failure to have adequate procedures to allow operators to properly set the thermostat of the Unit 2 refueling water storage tank (RWST) heaters and to ensure the RWST was recirculated frequently enough for the temperature indicator to accurately measure bulk temperature. On September 18, 2007, the Unit 2 RWST was found to be at 105 °F. This temperature exceeded the TS-maximum allowable limit of 100 °F (97 °F parametric) and could not be restored to acceptable limits before the eight-hour TS action statement expired. As a result, a shutdown of Unit 2 was commenced. At 20 percent power, a return to full power began after the RWST temperature was restored to within acceptable limits. It was later identified that the undesired heat-up was caused by the incorrect setting of the controlling thermostat for the RWST heaters.

The finding is more than minor because it is associated with the procedure quality and human performance attributes of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance (Green) because the elevated temperature of the RWST and subsequent shutdown sequence did not contribute to both the likelihood of a reactor trip and the

likelihood that mitigation equipment or functions would not be available. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance. Specifically, human error prevention techniques were not utilized prior to and during the thermostat setting task and personnel proceeded in the face of uncertainty and unexpected circumstances (H.4(a)).

Inspection Report# : [2007005](#) (*pdf*)

G

Significance: Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Adequate Post-Maintenance Testing for the Turbine-Driven Auxiliary Feedwater Pumps

The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to conduct adequate post-maintenance testing of the Unit 1 1P-29 turbine-driven auxiliary feedwater (TDAFW) pump following a ten-year overhaul of the turbine in May 2007. Specifically, the ten-year overhaul maintenance included bearing replacement, but the TDAFW pump was not run long enough during testing for bearing temperature to stabilize. The appropriate post-maintenance test would have detected that the bearing temperatures were rising and required evaluation prior to declaring the TDAFW pump operable. The licensee entered the issue into its corrective action program and took immediate corrective actions. Additionally, the licensee initiated changes to the inadequate procedures.

The finding is more than minor because, if left uncorrected, the issue would have become a more significant safety concern. The inspectors determined this finding was not a design qualification deficiency resulting in a loss of function per NRC Generic Letter 91-18, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk-significant due to a seismic, fire, flooding, or severe weather initiating event. Therefore, the finding is considered to be of very low safety significance (Green). Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance. Specifically, the licensee failed to ensure that procedures were adequate and accurate to assure nuclear safety (H.2(c)).

Inspection Report# : [2007005](#) (*pdf*)

G

Significance: Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Evaluate a Condition Adverse to Quality Associated with Turbine-Driven Auxiliary Feedwater Pump 2P-29

The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to implement prompt corrective actions for the degraded oil conditions initially identified with the Unit 2 2P-29 turbine-driven auxiliary feedwater (TDAFW) pump on September 24, 2007, following maintenance. Following an additional oil sample with favorable results, the licensee incorrectly concluded, due to confirmational biases, that the high water content of the first oil sample was an expected condition. The licensee wrote a condition report, but it was closed with no actions taken. In November 2007, the licensee identified that a significant degraded oil condition existed with the pump. The licensee entered the issue into its corrective action program and took immediate corrective actions, including rebuilding the pump turbine. The licensee continued to evaluate the causes and corrective actions to address this finding at the end of the inspection period.

The finding is more than minor because it could reasonably be viewed as a precursor to a significant event. Specifically, the failure to correct the cause of the oil degradation in a timely manner in September 2007 could have resulted in the failure of the 2P-29 TDAFW pump. The finding is of very low safety significance (Green) because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the TS allowed outage time, and no risk due to external events. Additionally, the inspectors determined that the finding had a cross-cutting area aspect in the area of problem identification and resolution. Specifically, the licensee failed to thoroughly evaluate the problem with water ingress into the oil, such that a resolution addressed the cause and extent of condition (P.1(c)).

Inspection Report# : [2007005](#) (*pdf*)

G

Significance: Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Provide Adequate Guidance to Ensure the Operability of the Main Steam System During a Steam Generator Tube Rupture

The inspectors identified a Non-Cited Violation (NCV) of Technical Specification 5.4, "Procedures," for the failure to have adequate procedures to ensure the continued operation of the steam dumps to the condenser to maintain a Reactor Coolant System (RCS) cooldown during a Steam Generator Tube Rupture (SGTR) event. Specifically, the procedures permitted the operators to lock in a Safety Injection (SI) signal and then reset SI more than once, which could cause an automatic closure of the Main Steam Isolation Valves (MSIVs) and a loss of steam dump to the condenser, which could result in a delay in terminating the Primary-To-Secondary Leakage. The licensee has initiated procedure change requests to the SGTR emergency operating procedures as a corrective action for this finding.

This finding was more than minor because it was associated with the attribute of procedure quality, which affected the mitigating systems cornerstone objective of ensuring the availability and reliability of the Main Steam (MS) system to respond to initiating events to prevent undesirable consequences. Steam dump to the condenser is the preferred means of cooling the RCS during a SGTR because it minimizes

radiological releases, conserves feedwater, and provides the most rapid cooldown capability. The finding is of very low safety significance based on the results of the SDP Phase 1 screening worksheet. The inspectors concluded that this finding was cross-cutting in the area of human performance, resources (H.2(c)), in that the licensee failed to have complete, accurate, and up-to-date procedures for the response to a SGTR event. This item was described in NRC Inspection Report 2007301, dated August 21, 2007, as Item Numbers 05000266/2007301-01 and 05000301/2007301-01.

Inspection Report# : [2007005](#) (*pdf*)

G

Significance: Dec 14, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Incorrect Factor of Safety Specified in Design Evaluation of Unit 1 SGBD HX Platform

The inspectors identified an NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," that was of very low safety significance involving a calculation that designed the Unit 1 Steam Generator Blowdown (SGBD) Heat Exchanger (HX) Platform to withstand a load from a postulated pipe whip of the condensate return line resulting from a High-Energy Line Break (HELB). The load from a postulated pipe whip applied to the platform was evaluated in calculation PBNP-994-10-S01, "SGBD HX Platform Mod. For Addition of Pipe Rupture Restraint for Condensate Return Line" which was approved on April 28, 2007. As a result of this calculation, the design function of the Unit 1 SGBD HX Platform was revised to hold and maintain the steam generator blowdown heat exchangers and condensate return line in position and assure that the platform did not fall onto the safety related Refueling Water Storage Tank (RWST) during a safe shutdown earthquake and a HELB simultaneously. Specifically, the licensee failed to correctly use the original design anchor bolt safety factor in the supporting calculation. This issue was entered into the licensee's corrective action program as condition report CAP 1118144.

The issue was more than minor because the calculation error would be expected to necessitate extensive calculation rework and possibly a modification in order to demonstrate that the platform meets design acceptance limits commensurate with those applied to original design. The finding screened as having very low safety significance (Green) because the inspectors answered "yes" to question 1 under the Mitigating Systems Cornerstone column of the Phase 1 worksheet. Specifically, the platform remained "operable but degraded". The cause of the finding was related to the cross-cutting element in Human Performance, Work Practices because the licensee did not ensure supervisory and management oversight of work activities, including contractors, such that nuclear safety is supported (item H.4(c) of IMC 0305). The licensee had failed to correctly use the original design anchor bolt safety factor in all three revisions of the design basis calculation.

Inspection Report# : [2007007](#) (*pdf*)

Barrier Integrity

G

Significance: Sep 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50, Appendix B Criterion V NCV for the Failure to Follow Procedures for Use of the Containment Hatch Doors

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self revealed for the failure to follow system operating procedure requirements to visually inspect and remove debris from the Unit 1 lower containment airlock door sealing surface upon exit from the airlock, which resulted in the failure of the airlock to meet its post maintenance testing acceptance criteria on September 9, 2008. As part of its corrective actions, the licensee reinforced with the hatch operators the procedural requirements.

The finding was determined to be more than minor because the finding was associated with the Barrier Integrity Cornerstone attribute of human performance and affected the cornerstone objective of providing reasonable assurance that physical design barriers, such as containment, protect the public from radionuclide releases caused by accidents or events. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a for the Barrier Integrity Cornerstone. The inspectors determined that the finding was of very low safety significance because all of the questions in the containment barrier column of Table 4a were answered NO. The inspectors also determined that this finding has a cross-cutting aspect in the area of human performance, work practices component, because personnel did not follow procedures.

Inspection Report# : [2008004](#) (*pdf*)

G

Significance: Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain Control of Containment Penetration Status

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to maintain adequate control over the status of containment penetrations

during the Unit 2 core reload evolution. Specifically, the licensee failed to adequately track the open and closed status of two isolation valves, such that, an unexpected pathway from containment to the atmosphere existed. The containment closure checklist indicated that the valves were closed and secured; however, they were in fact open during a period of fuel movement inside containment. At the end of the inspection period, the licensee continued to perform a causal evaluation and develop additional long term corrective actions.

The finding was more than minor because the failure to maintain the accuracy of the containment closure checklist affected the Barrier Integrity Cornerstone attribute of Configuration Control and affected the cornerstone objective of providing reasonable assurance that physical design barriers, such as containment, protect the public from radionuclide releases caused by accidents. Specifically, in the event of a fuel handling accident inside containment, the unknown position of these two vent valves could have resulted in the inability to restore containment closure in a timely manor. In accordance with IMC 0609, App G, "Shutdown Operations Significance Determination Process," the inspectors determined that the finding was of very low safety significance (Green) because at the time that the open pathway existed, the fuel being reloaded into the core had not recently (within the previous 65 hours) been irradiated in a critical core, and because of the relatively small diameter of the pathway. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance in that the licensee failed to use conservative assumptions in decision making

Inspection Report# : [2008003](#) (*pdf*)

G

Significance: Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Take Prompt Corrective Actions for Conditions Adverse to Quality Associated with the PAB Crane

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to implement prompt corrective actions for the degraded conditions initially identified with the single failure proof primary auxiliary building crane by maintenance personnel on January 17, 2008. As a result, on March 4, while a new fuel storage canister was being lowered in a laydown area after traversing the width of the spent fuel pool, the crane failed to the safe position with the load suspended approximately one foot off the floor. In a review of work order and corrective action history, the inspectors determined that all of the degraded conditions from January were not corrected during maintenance on February 21. The licensee entered the issue into its corrective action program and took immediate corrective actions, including repair of the crane. The licensee continued to evaluate the causes and corrective actions to address this finding at the end of the inspection period.

The finding is more than minor because it could reasonably be viewed as a precursor to a significant event. Specifically, the failure to correct the degraded condition of the primary auxiliary building crane resulted in the failure of the single failure proof crane while in use to move loads over the spent fuel pool. The finding affected the Barrier Integrity Cornerstone and is of very low safety significance (Green) because this spent fuel pool issue did not result in the loss of spent fuel pool cooling, did not result in damage to fuel clad integrity in the spent fuel pool, and did not result in a loss of spent fuel pool inventory. This finding has a cross cutting aspect in the area of problem identification and resolution because the licensee did not take appropriate corrective actions in a timely manner, commensurate with their safety significance and complexity.

Inspection Report# : [2008002](#) (*pdf*)

G

Significance: Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Piping Anchor Design not in Conformance with Design Basis Code Requirements

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to evaluate service water piping to pipe anchor integral welded attachments in conformance with the design requirements of the design basis American Society of Mechanical Engineers Boiler and Pressure Vessel Code. The licensee entered this issue into its corrective action program.

This finding is more than minor because it's associated with the design control attribute of the Barrier Integrity Cornerstone and affected the cornerstone objective to maintain the structural integrity of the service water system, structures, and components and the operational capability of the containment fan coolers. The finding was of very low safety significance (Green) based on a Phase 1 screening in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," and Appendix H, "Containment Integrity Significance Determination Process," because pressurized water reactor containment fan coolers impact late containment failure and source terms, but not large early release frequency. There was not a cross-cutting aspect to this finding.

Inspection Report# : [2008002](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety



Significance: Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Adequate Total Effective Dose Equivalent ALARA Evaluations

The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation of 10 CFR 20.1501 for the failure to perform an adequate survey (evaluation) to determine the use of respiratory protection equipment and/or engineering controls so as to maintain the total effective dose equivalent (TEDE) As-Low-As-Is-Reasonably-Achievable (ALARA). Specifically, TEDE ALARA evaluations completed in April 2008 prior to SG maintenance and maintenance support activities did not adequately assess the planned use of engineering controls to reduce the concentration of radioactive material in air. As a result, respirators were specified to be used when not warranted. As corrective actions, the licensee planned to reevaluate its TEDE ALARA evaluations for pending SG work activities, planned to develop a procedure specific to the performance of these evaluations, and was considering the need for supervisory or health physics staff review of these evaluations. The licensee entered the issue into its corrective action program as action request (AR) 01125284.

The finding is more than minor because it impacted the program and process attribute of the Occupational Radiation Safety Cornerstone and potentially affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation, in that not performing adequate evaluations to determine the use of respiratory protection equipment consistent with the engineering controls for the work would result in additional dose to workers. The finding was determined to be of very low safety significance because it was not an ALARA planning issue, there was no overexposure nor potential for overexposure, and the licensee's ability to assess dose was not compromised. The finding was determined to have a cross-cutting aspect in the resource component of the Human Performance area, because procedures were not adequate to ensure that TEDE ALARA evaluations were performed properly
Inspection Report# : [2008003](#) (*pdf*)

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: SL-IV Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a 10 CFR 50.59 Evaluation for Changes to SI System Valve Back-Seating Procedures

• Severity Level IV. The inspectors identified a Severity Level IV NCV, having very low safety significance, of 10 CFR 50.59, AChanges, Tests, and Experiments@, for the licensee=s failure to provide documented basis for determining that changes to procedures did not require prior NRC approval. Specifically, the licensee incorrectly concluded that a 10 CFR 50.59 screening was not required when procedures were revised to eliminate the practice of back-seating normally open gate/globe valves even though the UFSAR stated that normally open gate/globe valves in the Safety Injection (SI) system are back-seated to limit valve stem leakage.

The finding was determined to be more than minor because the team could not reasonably determine that the change to the plant procedure which had removed a barrier to release radioactivity into the PAB would not have ultimately required NRC prior approval. The finding was determined to be of very low safety significance because it only represented a degradation of the radiological barrier function provided for the auxiliary building. This finding has a cross-cutting aspect in the area of Human Performance, Decision Making, because during performance of the 10 CFR 50.59 applicability determination for a procedural change, in March 2008, the licensee made an inappropriate decision by failing to require a screen or full 50.59 evaluation. (H.1.(a)).

Inspection Report# : [2008009](#) (*pdf*)



Significance: Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Ensure Completion of New Supervisory Training

The inspectors identified a Non-Cited Violation (NCV) of Confirmatory Order EA 06-178 having very low safety significance (Green) for the licensee's failure to ensure that new employees holding supervisory positions and higher were trained on safety conscious work environment (SCWE) principles within nine months of their hire dates, unless they have had the same or equivalent SCWE training within the previous two years of the hire dates. Specifically, the inspectors identified that four new employees holding supervisory positions for greater than nine months of their hire dates as supervisors, had not received SCWE training, nor the same or equivalent training within the previous two years. At the end of the inspection period, the licensee was performing a causal analysis and developing corrective actions to address the issues identified by the inspectors.

The inspectors concluded that the finding is more than minor because if left uncorrected the finding would become a more significant safety concern. The finding would have been greater than very low significance had an action by the new supervisor resulted in a violation of 10 CFR Part 50.7 against an employee. The finding is not suitable for Significance Determination Process evaluation, but has been reviewed by NRC management and is determined to be a finding of very low safety significance. The inspectors determined that the finding had a cross-cutting area aspect in the area of human performance. Specifically, the licensee failed to ensure that supervisory and management oversight of the Confirmatory Order actions, such that nuclear safety was supported

Inspection Report# : [2008003](#) (*pdf*)

G

Significance: Jun 30, 2008

Identified By: NRC

Item Type: FIN Finding

Inadequate Corrective Actions to Address Licensee Action Plans

The inspectors identified a finding of very low safety significance (Green) for the failure to take timely and effective corrective actions to address four of the nine nuclear safety culture action plans and the quick hitter plans. Specifically, the licensee developed the action plans and quick hitter plans in response to the Confirmatory Order in the first quarter of 2007, to correct long standing safety culture issues identified by the licensee's comprehensive safety culture assessments conducted in 2004 and 2006. At the end of the inspection period, the licensee was performing a causal analysis and developing corrective actions to address the issues identified by the inspectors.

The finding is more than minor because if left uncorrected the finding would become a more significant safety concern. The finding would have been greater than very low significance had the failure to take corrective actions resulted in a more safety significant issue as a result of the incomplete action plans. The finding is not suitable for Significance Determination Process evaluation, but has been reviewed by NRC management and is determined to be a finding of very low safety significance. The inspectors determined that the finding had a cross-cutting area aspect in the area of problem identification and resolution. Specifically, the licensee failed to take appropriate corrective actions to address safety issues in a timely manner, commensurate with their safety significance and complexity

Inspection Report# : [2008003](#) (*pdf*)

Significance: SL-IV Dec 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate 10 CFR 72.48 Screening to Evaluate Possible Thermal Effects on Fuel Cladding

The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation of 10 CFR 72.48(c)(1) for the licensee's failure to obtain a Certificate of Compliance (CoC) amendment pursuant to 10 CFR 72.244, for changes made in the spent fuel storage cask operating procedures during the 2004 loading campaign as described in the Final Safety Analysis Report. The procedure changes constituted a change in the terms, conditions, or specifications incorporated in the CoC. Although the procedures were contained in the Final Safety Analysis Report, the licensee failed to identify that TS 1.2.17a, "32PT Dry Storage Canister (DSC) Vacuum Drying Duration Limit," was also affected by the procedure change and required prior NRC approval. The licensee implemented corrective actions, which included revising the loading procedure to reflect the sequence described in the FSAR prior to the next cask loading campaign.

This finding is more than minor because it had the potential to impact the NRC's ability to perform its regulatory function, since the licensee failed to receive NRC approval for a change in this licensed activity. The inspectors determined that the finding was not suitable for SDP evaluation because the noncompliance involved 10 CFR Part 72 dry fuel storage activities. Therefore, this finding was reviewed by regional management and dispositioned using traditional enforcement. The finding was determined to be of very low safety significance.

Inspection Report# : [2007005](#) (*pdf*)

Significance: N/A Dec 31, 2006

Identified By: NRC

Item Type: AV Apparent Violation

NRC to Review Items in Confirmatory Order Dated January 3, 2007, for Employment Discrimination Settlement.

In a letter dated January 3, 2007 (ADAMS Accession Number ML063630336), the NRC issued a Confirmatory Order to the licensee as part of a settlement agreement through the NRC's Alternative Dispute Resolution (ADR) process. The NRC investigated an alleged violation of 10 CFR 50.7, "Employee Protection," to determine whether a senior reactor operator was the subject of retaliation for raising a nuclear safety concern in the licensee's corrective action program. This issue was resolved through the NRC's ADR program and will be tracked as Apparent Violation (AV) 05000266/2006013-05; 05000301/2006013-05 pending NRC review of the licensee's completion of items specified in the Confirmatory Order.

NOTE: All of the specific items from this AV are also tracked as ORDER items in RPS/IR.

Inspection Report# : [2006013](#) (*pdf*)

Inspection Report# : [2008003](#) (*pdf*)

Last modified : November 26, 2008

Point Beach 2

4Q/2008 Plant Inspection Findings

Initiating Events

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Inspection Procedure for Containment Polar Crane Structures

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self revealed for the failure to have inspection procedures appropriate to the circumstances for the Unit 1 and Unit 2 containment polar cranes and their integral support structures. Specifically, station routine maintenance procedure 1(2) RMP 9118 1(2), "Containment Building Crane OSHA Operability Inspections," did not require that the polar crane lateral restraint bolts be inspected to ensure that they do not show signs of degradation or movement, e.g., flaking paint or being backed out of position. As a result, improperly installed bolts went undiscovered by the licensee until a failed bolt was found on October 16, 2008, lying on the containment floor. The discovery prompted further inspection of the entire crane support structure and led to the de rating of the polar crane's lifting capacity from 100 tons to 40 tons. In addition to conducting an extent-of-condition inspection, the licensee entered the issue into its corrective action program (CAP), replaced all degraded bolts, and performed an apparent cause evaluation.

The finding was determined to be more than minor because the finding was associated with the Initiating Events Cornerstone attribute of equipment performance and affected the cornerstone objective of limiting the likelihood of those events that challenge critical safety functions during shutdown. Specifically, failing to visually inspect critical bolting locations on crane supports could have allowed the use of the polar crane for heavy load lifts while in a degraded condition, increasing the likelihood of a load drop. The inspectors determined that the finding could be evaluated in accordance with IMC 0609, Appendix G, "Shutdown Operations SDP," dated February 28, 2005. The issue did not need a quantitative assessment and screened as Green using Figure 1. This finding has a cross cutting aspect in the area of human performance, resources, for the failure to have complete and accurate procedures in place. Specifically, the vague and insufficient detail in the crane inspection procedures contributed to the licensee's failure to perform an adequate inspection to identify degraded components prior to their failure [H.2(c)].

Inspection Report# : [2008005](#) (*pdf*)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: FIN Finding

Failure to Properly Store or Secure Tornado Missile Hazards in the Protected Area

The inspectors identified a finding of very low safety significance (Green) with no associated violation of regulatory requirements for the licensee's failure to maintain control over the proper storage and placement of materials within the protected area that were classified as tornado hazards per station Procedure PC 99. Specifically, these unsecured items were identified near the Unit 1 and Unit 2 main and auxiliary transformers, as well as the switchyard boundary. Once notified, the licensee entered the issue into its corrective action program and removed or secured the materials appropriately. At the end of the inspection period, the licensee continued to perform a causal evaluation and develop additional long term corrective actions.

The finding is more than minor because if left uncorrected, the loose items would become a more significant safety concern. The finding is of very low safety significance (Green) because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of problem identification and resolution in that the licensee failed to take appropriate corrective actions to address safety issues and adverse trends in a timely manner,

commensurate with their safety significance [P.1(d)].

Inspection Report# : [2008003](#) (*pdf*)

G

Significance: Jun 30, 2008

Identified By: NRC

Item Type: FIN Finding

Failure to Implement Appropriate Design and Configuration Control for the Unit Polar Crane

A self-revealed finding of very low significance (Green) with no associated violation of regulatory requirements was identified for the failure to implement appropriate design and configuration control for the Unit 2 polar crane upgrade project, which resulted in issues associated with reliable operation of the polar crane during the first reactor vessel head lift. Specifically, a lack of configuration control on the crane radio system resulted in a loss of radio communications during the initial reactor vessel head lift over the reactor vessel head stand, which resulted in unreliable crane operation. The licensee implemented remedial corrective actions to address the design issues with the polar crane bridge drive motors which resulted in unavailability at the beginning of the outage and ensured the radio receivers were appropriately configured and installed. The licensee performed a root cause analysis to determine the cause of the design and configuration control issues associated with the polar crane and developed additional corrective actions to address this performance deficiency.

The finding is more than minor because it is associated with the design control attribute of the Initiating Events Cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The finding is of very low safety significance (Green) because the finding did not meet the criteria for a Phase 2 or Phase 3 Analysis, as specified in Inspection Manual Chapter 0609 Appendix G, Attachment 1, Checklist 1, "Pressurized Water Reactor Hot Shutdown Operation: Time to Core Boiling < 2 Hours." The inspectors did not identify a cross-cutting aspect associated with this finding.

Inspection Report# : [2008003](#) (*pdf*)

G

Significance: Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Take Prompt Corrective Actions for Recurring Cold Weather Issues

The inspectors identified a finding and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," having very low safety significance (Green) for the license's failure to take prompt corrective actions to address recurring cold weather issues in the facade building which again occurred in January 2008. The failure to take prompt corrective actions led to the formation of ice on offsite power and plant equipment cable trays and cabling, which supplied offsite power to both Units' busses. The sheets of ice were also in proximity to the Unit 2 refueling water storage tank level indicators and outlet piping. The licensee initiated condition reports, took immediate corrective actions, and was performing a causal evaluation at the end of the inspection period.

The finding is more than minor because if left uncorrected the finding would become a more significant safety concern in that the formation of ice in the facade building in this case could have affected safety related equipment. Because the ice buildup in the Unit 2 facade was an external factor and transient initiator contributor that did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available, the finding is considered to be of very low safety significance (Green). This finding has a cross-cutting aspect in the area of problem identification and resolution because the licensee did not take appropriate corrective actions in a timely manner, commensurate with their safety significance and complexity (P.1(d)). (Section 1R01)

Inspection Report# : [2008002](#) (*pdf*)

Significance:  Sep 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50 , Appendix B, Criteriod V NCV for the Failure to have Adequate Maintenance Procedures for Service Water Pump Replacements

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the failure to properly rig and install the P-32E service water pump shaft on June 7, 2006. The bent pump shaft subsequently led to high pump vibrations and pump inoperability in excess of Technical Specification Action Condition completion time in February 2008. Specifically, the licensee determined that Routine Maintenance Procedure (RMP), RMP 9216-2, "Service Water Pump Removal, Installation, and Maintenance," lacked adequate installation and rigging instructions to ensure excessive force was not applied to the shaft during installation. As part of its corrective actions, the licensee revised the RMP to include proper installation and rigging instructions.

The finding was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of equipment performance, and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Tables 3b and 4a for the Mitigating Systems Cornerstone. The inspectors determined that the finding was of very low safety significance (Green) because the finding did not involve a design or qualification deficiency, there was no actual loss of safety function, no single train loss of safety function for greater than the technical specification allowed outage time, and no risk due to external events. The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance, resources component, because licensee procedures were not complete or adequate to ensure that the P-32E pump shaft was rigged and installed without damage to the shaft. [H.2 (c)] (Section 40A3.1)

Inspection Report# : [2008004](#) (*pdf*)

Significance:  Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Equalizing Charge Voltage Not Bounded by Battery Room Hydrogen Generation Calculation

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, ADesign Control, was identified by the team for the failure to ensure that the design limit established in a design basis calculation, used to determine safety-related batteries hydrogen generation rate, bounded the value used in a maintenance procedure for a safety related component. During the inspection, the licensee evaluated and determined that the effect of the higher hydrogen gas generation did not have an impact on the operability of the batteries and the ventilation system.

The finding was greater than minor because the lack of adequate design control process resulted in increase of hydrogen generation levels and in a reasonable doubt of operability of the 125-Volts direct current system. The finding was determined to be of very low significance, because it was a design deficiency that did not result in actual loss of safety function. This finding does not have a cross-cutting aspect because it is not indicative of current performance.

Inspection Report# : [2008009](#) (*pdf*)

Significance:  Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Conservative Design Basis for Primary Auxiliary Building Heat-up

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, Design Control, was identified by the team for the failure to verify the accuracy of design using alternative or simplified calculational methods or by the performance of a suitable testing program. Specifically, the licensee used

non-conservative field test data as a basis for the design temperatures given in the equipment qualification (EQ) manual for components in the auxiliary building, resulting in specified design temperatures for some safety related components that may be as much as approximately 40 degrees Fahrenheit less than calculated worst case accident condition temperatures. The licensee re-evaluated the consequences of the higher temperatures and concluded the equipment remained operable.

The finding was determined to be more than minor because, if the EQ design temperatures were left uncorrected, this deficiency could lead to inadequately qualified replacement parts or inadequately designed plant modifications in the future. The finding was determined to be of very low significance because, by the end of the inspection, the licensee was able to show that all affected components were capable of performing their safety related functions under the higher than previously anticipated temperatures. The team did not identify a cross-cutting aspect associated with this finding.

Inspection Report# : [2008009](#) (pdf)

Significance:  Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Ability to Transfer Fuel Oil Between EDG Fuel Oil Tanks T-175A/B Has Not Been Demonstrated by Testing

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XI, Test Control, was identified by the team for the failure to test the components used for transfer of fuel oil between two underground storage tanks that support emergency diesel generator (EDG) operation. Specifically, the licensee has not demonstrated the transfer of fuel between tanks T-175A and T-175B as credited in the Technical Specification (TS) Basis and Updated Safety Analysis Report. The licensee entered this issue into its corrective action and prepared to test these components.

This finding was determined to be more than minor because the failure to verify the transfer capability affected the ability to ensure emergency power availability for greater than two days. This finding was screened as very low safety significance because it was a deficiency that did not result in the loss of safety function. This finding does not have a cross-cutting aspect because it was not indicative of current performance.

Inspection Report# : [2008009](#) (pdf)

Significance:  Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

RHR Pump Suction Pressure Gages Repeatedly Found To Be Out Of Tolerance

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XII, AControl of Measuring and Test Equipment,@ was identified by the team for the failure to correct a known trend of out of tolerance (OOT) test pressure gauge which were used in a critical In Service Test (IST) Program performance test of the residual heat removal (RHR) pumps for Units 1 and 2. The licensee entered this issue into its corrective action and confirmed operability of the RHR pumps.

The finding was determined to be more than minor because, if left uncorrected, it could become a more significant safety concern. Specifically, since the cause of the high frequency OOT conditions for these pressure gauges has not been identified, it could be assumed that this instrumentation could be out of tolerance in a non-conservative manner. The finding was determined to be of very low significance because the comprehensive IST performance test conducted during the 2008 refueling outage showed that the actual test results were within the acceptable band, thereby confirming that operability and functionality of the RHR pumps had not been lost. This finding has a cross-cutting aspect in the area of Human Performance, Resources because the licensee did not ensure adequate resources were available to minimize long-standing equipment issues. (H.2(a))

Inspection Report# : [2008009](#) (pdf)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Address Sprinkler Head Obstructions in 'B' Train EDG Rooms

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of License Condition 4.F for the failure to address fire suppression sprinkler head obstructions in the 'B' train emergency diesel generator (EDG) rooms. The inspectors identified that five sprinkler heads were obstructed in the 'B' train EDG rooms. National Fire Protection Association (NFPA) 13-1991, "Installation of Sprinkler Systems" was the applicable standard for sprinkler systems installed in the two rooms. The inspectors determined that failure to address sprinkler head obstructions was contrary to NFPA 13-1991 and was a performance deficiency.

The finding was more than minor because the failure to address sprinkler head obstructions was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Factors (Fire) and affected the cornerstone objective of ensuring the capability of systems that respond to initiating events. Specifically, the identified obstructions to sprinkler heads would affect the sprinkler spray patterns and distribution thereby impacting the sprinkler systems capability to control a fire. In accordance with Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," and IMC 0609, Appendix F, "Fire Protection Significance Determination Process [SDP]," the inspectors considered the finding to represent a moderate degradation of the water based suppression system for both rooms. As such, the inspectors performed a Phase 2 SDP. The inspectors concluded that potential fire scenarios associated with the finding were effectively FDS0 fire scenarios as described in Section 2.2 of IMC 609, Appendix F, and that the issue was of very low safety significance (i.e., Green). The inspectors did not identify a cross-cutting aspect associated with this finding.

Inspection Report# : [2008003](#) (pdf)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Manage Online Risk for Breaker 1B52-16C Work

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50.65(a)(4), "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," when the licensee failed to adequately manage the risk associated with work on the 480-volt alternating current breaker 1B52 16C, coincident with a large number of other out-of-service components, which resulted in an unplanned risk condition for Unit 1 without the appropriate risk management actions. Specifically, the licensee incorrectly assumed that planned work on breaker 1B52 16C did not render the breaker unavailable, and that the breaker was not utilized in Modes 1, 2, or 3. Consequently, the component was not factored into the Safety Monitor online risk model. However, breaker 1B52 16C was in fact unavailable and also utilized in abnormal operating procedures for Modes 1, 2 and 3. Therefore, unavailability of the breaker was required to have been factored into Safety Monitor with appropriate risk management actions taken. The licensee took corrective actions to perform an apparent cause evaluation that identified the apparent cause of the issue and recommended a number of corrective actions to address the procedural and human performance deficiencies that were identified.

The finding was greater than minor because the finding was based on incorrect assumptions that changed the outcome of the risk assessment. The inspectors evaluated this finding using the Appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process" worksheets of Inspection Manual Chapter 0609 because the finding is a maintenance risk assessment issue. Flowchart 1, "Assessment of Risk Deficit," requires the inspectors to determine the risk deficit associated with this issue. This finding was determined to be of very low safety significance because the incremental core damage probability deficit was less than 1E-6. The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance. Specifically, the licensee failed to use conservative assumptions in decision-making and adopt a requirement to demonstrate that the proposed action was safe in order to proceed rather than a requirement to demonstrate that it is unsafe in order to disapprove the action [H.1(b)].

Inspection Report# : [2008003](#) (pdf)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedures for DY-0C Inverter Maintenance

A self-revealing finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for the failure to have appropriate maintenance procedures and work instructions in place to identify improperly installed components prior to the attempted restoration of the DY-0C white channel instrument inverter. Specifically, the routine maintenance procedure did not contain instructions to check for direct current (DC) grounds following maintenance and prior to restoration, which allowed a ground to go undetected and cause a number of unplanned Technical Specification Action Condition (TSAC) entries as well as the unplanned inoperability of the G-01 and G-02 emergency diesel generators and the 2PI 9046 containment pressure indicator. At the end of the inspection period, the licensee continued to perform a causal evaluation and develop additional long-term corrective actions.

The finding was more than minor because it is associated with the Procedure Quality attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors evaluated the finding using Inspection Manual Chapter 0609, Appendix A, Attachment 1, "Significance Determination of Reactor Inspection Findings for At-Power Situations," dated January 10, 2008. The inspectors determined that the finding was of very low safety significance (Green) because the finding did not involve a design or qualification deficiency, there was no actual loss of safety function, no single train loss of safety function for greater than the technical specification (TS) allowed outage time, and no risk due to external events. The inspectors also determined that the finding had a cross-cutting aspect in the area of human performance. Specifically, procedures were not complete or adequate to ensure that installation errors would be detected prior to restoration of the DY-0C inverter [H.2(c)].

Inspection Report# : [2008003](#) (*pdf*)

G

Significance: Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedures for Reduced Inventory with an Intact Reactor Coolant System

A finding of very low safety significance and associated NCV of TS 5.4.1, "Procedures," was identified by the inspectors for the failure to protect all of the safety equipment necessary for safe shutdown while in reduced inventory with the reactor coolant system (RCS) intact. Specifically, the licensee failed to ensure that an auxiliary feedwater source and steam generator (SG) were available for decay heat removal when a reduced inventory condition was entered and the RCS was intact. The licensee's responses to Generic Letter 88-17, "Loss of Decay Heat Removal," indicated that the first drain of the RCS to reduced inventory following shutdown could be accomplished with the RCS intact and reflux cooling (with a SG and auxiliary feedwater source) as an alternate decay heat removal path. The licensee was performing a causal evaluation of this issue and developing corrective actions at the end of the assessment period.

The finding was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of human performance and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance (Green) because the finding did not meet the criteria for a Phase 2 or Phase 3 Analysis, as specified in Inspection Manual Chapter 0609 Appendix G, Attachment 1, Checklist 3. The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance. Specifically, the licensee failed to ensure that procedures were adequate and accurate to assure nuclear safety [H.2(c)].

Inspection Report# : [2008003](#) (*pdf*)

G

Significance: Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain RCS within Procedurally Allowed level During Reduced Inventory

A finding of very low safety significance and associated NCV of TS 5.4.1, "Procedures," was identified by the inspectors for the failure to implement operations procedures to remain above the ¾ pipe level indications for draining the RCS while in reduced inventory. Specifically, during the second planned orange risk condition of the Unit 2 refueling outage to facilitate removal of the SG nozzle dams, operators drained the RCS below the procedurally required 22 percent level, as indicated by the most conservative reactor vessel level indication. The licensee took immediate corrective actions to address the issue and was performing a causal evaluation and developing corrective actions at the end of the assessment period.

The finding was determined to be more than minor because it is associated with the Mitigating Systems Cornerstone attribute of human performance and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance (Green) because the finding did not meet the criteria for a Phase 2 or Phase 3 Analysis, as specified in IMC 0609 Appendix G, Attachment 1, Checklist 3. The inspectors also determined that the finding has a cross cutting aspect in the area of human performance. Specifically, the licensee failed to use conservative assumptions in decision-making and adopt a requirement to demonstrate that the proposed action was safe in order to proceed rather than a requirement to demonstrate that it is unsafe in order to disapprove the action [H.1(b)]. (Section 1R20.2)

Inspection Report# : [2008003](#) (pdf)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Maintenance Procedure for Turbine-Driven Auxiliary Feedwater Pump 2P-29

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the failure to ensure that procedures associated with the maintenance of the turbine for the turbine-driven auxiliary feedwater pump were appropriate to the circumstances. Specifically, the licensee's maintenance procedures did not address the following significant issues: 1) proper application of sealant material used on turbine casing joints; 2) proper cure time of sealant material used on turbine casing joints; 3) prescribed methods for tightening of the oil deflector ring set screw was not discussed; and 4) acceptable clearances between the turbine shaft and the inner diameter of the oil deflector ring were not specified. The licensee took immediate corrective actions to address the issue, conducted a root cause evaluation, and developed corrective actions to address the root causes, contributing causes, and extent of condition associated with this finding. The finding was more than minor because it affected the Mitigating Systems Cornerstone attributes of equipment performance availability and reliability, and maintenance procedure quality, as well as the cornerstone objective of ensuring the availability and reliability of systems. The inspectors evaluated the finding in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 Initial Screening and Characterization of Findings." The inspectors determined this finding was not a design qualification deficiency resulting in a loss of function per Generic Letter 91-18, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk-significant due to a seismic, fire, flooding, or severe weather initiating event. Therefore, the finding was considered to be of very low safety significance (Green). The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee failed to ensure that procedures were adequate and accurate to assure nuclear safety [H.2(c)]. (Section 4OA5.1)

Inspection Report# : [2008003](#) (pdf)

Barrier Integrity

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Conservative Low Temperature Overpressure Protection Setpoints

. A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design

Control,” was self revealed upon discovery of the use of a non-conservative setpoint for the Low Temperature Overpressure Protection (LTOP) systems for Units 1 and 2. Specifically, licensee calculation 2000-0001, “RCS [Reactor Coolant System] Pressure and Temperature Limits and Low Temperature Overpressure Protection Setpoints Applicable through 32.2 EFY – Unit 1 and 34.0 EFY – Unit 2,” established an LTOP setpoint of 500 pounds per square inch – gauge (psig). However, by using the setpoint calculation methodology of 10 CFR Part 50, Appendix G, the resulting LTOP setpoint was calculated to be 420 psig. Therefore, the 500 psig setpoint was found to be non conservative and the LTOP systems were declared inoperable. As part of its corrective actions, the licensee revised the LTOP setpoints from 500 psig to 420 psig and made changes to operating procedures to delineate the acceptable operating conditions of the reactor coolant pumps and charging pumps during low temperature conditions.

The finding was determined to be more than minor because the finding was associated with the human performance attribute of the Barrier Integrity Cornerstone and affected the cornerstone objective of providing reasonable assurance that physical design barriers, such as containment, protect the public from radionuclide releases caused by accidents or events. Specifically, the non-conservative LTOP setpoint provided reasonable doubt that the integrity of the RCS pressure boundary would be maintained during low temperature conditions. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Phase 1 - Initial Screening and Characterization of Findings,” Table 4a for the Barrier Integrity Cornerstone, dated January 10, 2008. The inspectors determined that the finding was of very low safety significance (Green) because all of the questions in the containment barrier column of Table 4a were answered NO and the actual setpoint of the power operated relief valves was 415 psig, below the revised LTOP setpoint. The inspectors also determined that the finding has a cross cutting aspect in the area of problem identification and resolution, corrective action program component, because personnel did not use a low threshold for identifying issues [P.1(a)].

Inspection Report# : [2008005](#) (pdf)

Significance:  Sep 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

10 CFR 50, Appendix B Criterion V NCV for the Failure to Follow Procedures for Use of the Containment Hatch Doors

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” was self revealed for the failure to follow system operating procedure requirements to visually inspect and remove debris from the Unit 1 lower containment airlock door sealing surface upon exit from the airlock, which resulted in the failure of the airlock to meet its post maintenance testing acceptance criteria on September 9, 2008. As part of its corrective actions, the licensee reinforced with the hatch operators the procedural requirements.

The finding was determined to be more than minor because the finding was associated with the Barrier Integrity Cornerstone attribute of human performance and affected the cornerstone objective of providing reasonable assurance that physical design barriers, such as containment, protect the public from radionuclide releases caused by accidents or events. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Phase 1 - Initial Screening and Characterization of Findings,” Table 4a for the Barrier Integrity Cornerstone. The inspectors determined that the finding was of very low safety significance because all of the questions in the containment barrier column of Table 4a were answered NO. The inspectors also determined that this finding has a cross-cutting aspect in the area of human performance, work practices component, because personnel did not follow procedures. [H.4(b)] (Section 1R19.1)

Inspection Report# : [2008004](#) (pdf)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain Control of Containment Penetration Status

A finding of very low safety significance and associated NCV of 10 CFR 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” was identified by the inspectors for the failure to maintain adequate control over the

status of containment penetrations during the Unit 2 core reload evolution. Specifically, the licensee failed to adequately track the open and closed status of two isolation valves, such that an unexpected pathway from containment to the atmosphere existed. The containment closure checklist indicated that the valves were closed and secured; however, they were in fact open during a period of fuel movement inside containment. At the end of the inspection period, the licensee continued to perform a causal evaluation and develop additional long-term corrective actions.

The finding was determined to be more than minor because the failure to maintain the accuracy of the containment closure checklist affected the Barrier Integrity Cornerstone attribute of configuration control and affected the cornerstone objective of providing reasonable assurance that physical design barriers, such as containment, protect the public from radionuclide releases caused by accidents. Specifically, in the event of a fuel handling accident inside containment, the unknown position of these two vent valves could have resulted in the inability to restore containment closure in a timely manner. The finding is of very low safety significance (Green) because the finding did not meet the criteria for a Phase 2 or Phase 3 Analysis, as specified in IMC 0609 Appendix G, Attachment 1, Checklist 4. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance in that the licensee failed to use conservative assumptions in decision-making [H.1(b)]. (Section 1R20.3)

Inspection Report# : [2008003](#) (*pdf*)

Significance:  Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Take Prompt Corrective Actions for Conditions Adverse to Quality Associated with the PAB Crane

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to implement prompt corrective actions for the degraded conditions initially identified with the single failure proof primary auxiliary building crane by maintenance personnel on January 17, 2008. As a result, on March 4, while a new fuel storage canister was being lowered in a laydown area after traversing the width of the spent fuel pool, the crane failed to the safe position with the load suspended approximately one foot off the floor. In a review of work order and corrective action history, the inspectors determined that all of the degraded conditions from January were not corrected during maintenance on February 21. The licensee entered the issue into its corrective action program and took immediate corrective actions, including repair of the crane. The licensee continued to evaluate the causes and corrective actions to address this finding at the end of the inspection period.

The finding is more than minor because it could reasonably be viewed as a precursor to a significant event. Specifically, the failure to correct the degraded condition of the primary auxiliary building crane resulted in the failure of the single failure proof crane while in use to move loads over the spent fuel pool. The finding affected the Barrier Integrity Cornerstone and is of very low safety significance (Green) because this spent fuel pool issue did not result in the loss of spent fuel pool cooling, did not result in damage to fuel clad integrity in the spent fuel pool, and did not result in a loss of spent fuel pool inventory. This finding has a cross cutting aspect in the area of problem identification and resolution because the licensee did not take appropriate corrective actions in a timely manner, commensurate with their safety significance and complexity (P.1(d)).

Inspection Report# : [2008002](#) (*pdf*)

Significance:  Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Piping Anchor Design not in Conformance with Design Basis Code Requirements

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to evaluate service water piping to pipe anchor integral welded attachments in conformance with the design requirements of the design basis American Society of Mechanical Engineers Boiler and Pressure Vessel Code. The licensee entered this issue into its corrective action program.

This finding is more than minor because it's associated with the design control attribute of the Barrier Integrity

Cornerstone and affected the cornerstone objective to maintain the structural integrity of the service water system, structures, and components and the operational capability of the containment fan coolers. The finding was of very low safety significance (Green) based on a Phase 1 screening in accordance with Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," and Appendix H, "Containment Integrity Significance Determination Process," because pressurized water reactor containment fan coolers impact late containment failure and source terms, but not large early release frequency. There was not a cross-cutting aspect to this finding.

Inspection Report# : [2008002](#) (pdf)

Emergency Preparedness

Occupational Radiation Safety

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Adequate Total Effective Dose Equivalent ALARA Evaluations

A finding of very low safety significance and associated NCV of 10 CFR 20.1501 was identified by the inspectors for the failure to perform an adequate survey (evaluation) to determine the use of respiratory protection equipment and/or engineering controls so as to maintain the total effective dose equivalent (TEDE) ALARA. Specifically, TEDE ALARA evaluations completed in April 2008 prior to SG maintenance and maintenance support activities did not adequately assess the planned use of engineering controls to reduce the concentration of radioactive material in air. As a result, respirators were specified to be used when not warranted based on the engineering controls to be implemented. As corrective actions, the licensee planned to reevaluate its TEDE ALARA evaluations for pending SG work activities, planned to develop a procedure specific to the performance of these evaluations, and was considering the need for supervisory or health physics staff review of these evaluations. The licensee entered the issue into its corrective action program as action request (AR) 01125284.

The finding was determined to be more than minor because it impacted the Occupational Radiation Safety Cornerstone attribute of program and process and potentially affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation, in that not performing adequate evaluations to determine the use of respiratory protection equipment consistent with the engineering controls for the work would result in additional dose to workers. The finding was determined to be of very low safety significance because it was not an ALARA planning issue, there was no overexposure nor potential for overexposure, and the licensee's ability to assess dose was not compromised. The finding was determined to have a cross-cutting aspect in the resource component of the human performance area, because procedures were not adequate to ensure that TEDE ALARA evaluations were performed properly [H.2(c)]. (Section 2OS2.2)

Inspection Report# : [2008003](#) (pdf)

Public Radiation Safety

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Establish Written Procedures to Implement the Effluent Control Program as Provided in the ODCM

The inspectors identified a finding of very low safety significance and an associated NCV of TS 5.4.1 for the failure to

establish written procedures to implement the radioactive effluent control program as provided in the Offsite Dose Calculation Manual to ensure effluent sample analyses satisfied required detection criteria. Specifically, no process was established to ensure that effluent analysis capabilities for chemistry analytical equipment were periodically demonstrated to meet required lower levels of detection (LLDs). As corrective actions, the licensee subsequently performed LLD determinations for its analytical equipment (gamma spectroscopy system) and developed procedures to ensure LLDs were periodically verified consistent with industry standards.

The finding was determined to be more than minor because it affected the program and process attribute of the Public Radiation Safety Cornerstone and affected the cornerstone objective of ensuring adequate protection of public health and safety from exposure to radioactive material released into the public domain. Specifically, given the instability in the licensee's gamma spectroscopy system since 2007, as evidenced by repetitive performance check failures, the ability of the equipment to achieve required LLDs could have been impacted or necessitated changes in analysis parameters (such as count times) resulting in non-conservative effluent quantification. The inspectors determined that the finding was of very low safety significance (Green) because it did not represent a substantial failure to implement the effluent release program or result in public dose that exceeded specified criterion. The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance, resources component, in that the licensee failed to develop procedures to fully implement its effluent program as provided in the Offsite Dose Calculation Manual (ODCM) [H.2(c)].

Inspection Report# : [2008005](#) (pdf)

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: SL-IV Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a 10 CFR 50.59 Evaluation for Changes to SI System Valve Back-Seating Procedures

• Severity Level IV. The inspectors identified a Severity Level IV NCV, having very low safety significance, of 10 CFR 50.59, AChanges, Tests, and Experiments@, for the licensee's failure to provide documented basis for determining that changes to procedures did not require prior NRC approval. Specifically, the licensee incorrectly concluded that a 10 CFR 50.59 screening was not required when procedures were revised to eliminate the practice of back-seating normally open gate/globe valves even though the UFSAR stated that normally open gate/globe valves in the Safety Injection (SI) system are back-seated to limit valve stem leakage.

The finding was determined to be more than minor because the team could not reasonably determine that the change to the plant procedure which had removed a barrier to release radioactivity into the PAB would not have ultimately required NRC prior approval. The finding was determined to be of very low safety significance because it only represented a degradation of the radiological barrier function provided for the auxiliary building. This finding has a cross-cutting aspect in the area of Human Performance, Decision Making, because during performance of the 10 CFR 50.59 applicability determination for a procedural change, in March 2008, the licensee made an inappropriate decision by failing to require a screen or full 50.59 evaluation. (H.1.(a)).

Inspection Report# : [2008009](#) (pdf)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Ensure Completion of New Supervisory Training

A NCV of Confirmatory Order EA 06-178 having very low safety significance (Green) was identified by the inspectors for the licensee's failure to ensure that new employees holding supervisory positions and higher were trained on safety conscious work environment (SCWE) principles within nine months of their hire dates, unless they have had the same or equivalent SCWE training within the previous two years of the hire dates. Specifically, the inspectors identified that four new employees holding supervisory positions for greater than nine months of their hire dates as supervisors, had not received SCWE training, nor the same or equivalent training within the previous two years. At the end of the inspection period, the licensee was performing a causal analysis and developing corrective actions to address the issues identified by the inspectors.

The finding was determined to be more than minor because if left uncorrected the finding would become a more significant safety concern. The finding would have been greater than very low significance had an action by the new supervisor resulted in a violation of 10 CFR 50.7 against an employee. The finding is not suitable for SDP evaluation, but has been reviewed by NRC management and is determined to be a finding of very low safety significance. The inspectors determined that the finding had a cross-cutting area aspect in the area of human performance. Specifically, the licensee failed to ensure that supervisory and management oversight of the Confirmatory Order actions, such that nuclear safety was supported [H.4(c)]. (Section 4OA5.2)

Inspection Report# : [2008003](#) (*pdf*)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: FIN Finding

Inadequate Corrective Actions to Address Licensee Action Plans

A finding of very low safety significance was identified by the inspectors for the failure to take timely and effective corrective actions to address four of nine nuclear safety culture action plans and the "quick hitter" plans. Specifically, the licensee developed the action plans and "quick hitter" plans in response to the Confirmatory Order in the first quarter of 2007, to correct longstanding safety culture issues identified by the licensee's comprehensive safety culture assessments conducted in 2004 and 2006. At the end of the inspection period, the licensee was performing a causal analysis and developing corrective actions to address the issues identified by the inspectors.

The finding was determined to be more than minor because if left uncorrected the finding would become a more significant safety concern. The finding would have been greater than very low significance had the failure to take corrective actions resulted in a more safety significant issue as a result of the incomplete action plans. The finding is not suitable for Significance Determination Process evaluation, but has been reviewed by NRC management and is determined to be a finding of very low safety significance. The inspectors determined that the finding had a cross-cutting area aspect in the area of problem identification and resolution. Specifically, the licensee failed to take appropriate corrective actions to address safety issues in a timely manner, commensurate with their safety significance and complexity [P.1(d)].

Inspection Report# : [2008003](#) (*pdf*)

Significance: N/A Dec 31, 2006

Identified By: NRC

Item Type: AV Apparent Violation

NRC to Review Items in Confirmatory Order Dated January 3, 2007, for Employment Discrimination Settlement.

In a letter dated January 3, 2007 (ADAMS Accession Number ML063630336), the NRC issued a Confirmatory Order to the licensee as part of a settlement agreement through the NRC's Alternative Dispute Resolution (ADR) process. The NRC investigated an alleged violation of 10 CFR 50.7, "Employee Protection," to determine whether a senior reactor operator was the subject of retaliation for raising a nuclear safety concern in the licensee's corrective action program. This issue was resolved through the NRC's ADR program and will be tracked as Apparent Violation (AV) 05000266/2006013-05; 05000301/2006013-05 pending NRC review of the licensee's completion of items specified in the Confirmatory Order.

NOTE: All of the specific items from this AV are also tracked as ORDER items in RPS/IR.

Inspection Report# : [2006013](#) (*pdf*)

Inspection Report# : [2008003](#) (*pdf*)

Last modified : April 07, 2009

Point Beach 2

1Q/2009 Plant Inspection Findings

Initiating Events

Significance:  Mar 27, 2009

Identified By: NRC

Item Type: FIN Finding

Failure To Adequately Control High Winds/Tornado Hazards

A finding of very low safety significance was identified by the inspectors for the licensee's failure to maintain control over the proper storage and placement of materials, within the risk significant areas of the outdoors protected area, that were classified as high winds/tornado hazards in accordance with station procedures PC 99, "Tornado Hazards Inspection Checklist," and NP 1.9.6, "Plant Cleanliness and Storage." Specifically, these unsecured items were identified near the Unit 1 and Unit 2 main transformer lines, auxiliary transformers, and the G 03/G 04 emergency diesel generator building. Once notified, the licensee removed or secured the materials appropriately and entered the issue into its corrective action program. At the end of the inspection period, the licensee continued to perform a root cause evaluation and develop long-term corrective actions.

The finding was determined to be more than minor because if left uncorrected, the loose items would become a more significant safety concern. The inspectors evaluated the finding using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," dated January 10, 2008. The finding is of very low safety significance (Green) because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance, work practices component, because the licensee failed to ensure adequate supervisory and management oversight of the implementation and follow through of the corrective actions from previous related issues (H.4(c)).

Inspection Report# : [2009006](#) (*pdf*)

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Inspection Procedure for Containment Polar Crane Structures

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self revealed for the failure to have inspection procedures appropriate to the circumstances for the Unit 1 and Unit 2 containment polar cranes and their integral support structures. Specifically, station routine maintenance procedure 1(2) RMP 9118 1(2), "Containment Building Crane OSHA Operability Inspections," did not require that the polar crane lateral restraint bolts be inspected to ensure that they do not show signs of degradation or movement, e.g., flaking paint or being backed out of position. As a result, improperly installed bolts went undiscovered by the licensee until a failed bolt was found on October 16, 2008, lying on the containment floor. The discovery prompted further inspection of the entire crane support structure and led to the de rating of the polar crane's lifting capacity from 100 tons to 40 tons. In addition to conducting an extent-of-condition inspection, the licensee entered the issue into its corrective action program (CAP), replaced all degraded bolts, and performed an apparent cause evaluation.

The finding was determined to be more than minor because the finding was associated with the Initiating Events Cornerstone attribute of equipment performance and affected the cornerstone objective of limiting the likelihood of those events that challenge critical safety functions during shutdown. Specifically, failing to visually inspect critical bolting locations on crane supports could have allowed the use of the polar crane for heavy load lifts while in a degraded condition, increasing the likelihood of a load drop. The inspectors determined that the finding could be evaluated in accordance with Inspection Manual Chapter 0609, Appendix G, "Shutdown Operations SDP

[Significance Determination Process],” dated February 28, 2005. The issue did not need a quantitative assessment and screened as Green using Figure 1. This finding has a cross-cutting aspect in the area of human performance, resources, for the failure to have complete and accurate procedures in place. Specifically, the vague and insufficient detail in the crane inspection procedures contributed to the licensee’s failure to perform an adequate inspection to identify degraded components prior to their failure [H.2(c)].

Inspection Report# : [2008005](#) (pdf)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: FIN Finding

Failure to Properly Store or Secure Tornado Missile Hazards in the Protected Area

The inspectors identified a finding of very low safety significance (Green) with no associated violation of regulatory requirements for the licensee’s failure to maintain control over the proper storage and placement of materials within the protected area that were classified as tornado hazards per station Procedure PC 99. Specifically, these unsecured items were identified near the Unit 1 and Unit 2 main and auxiliary transformers, as well as the switchyard boundary. Once notified, the licensee entered the issue into its corrective action program and removed or secured the materials appropriately. At the end of the inspection period, the licensee continued to perform a causal evaluation and develop additional long term corrective actions.

The finding is more than minor because if left uncorrected, the loose items would become a more significant safety concern. The finding is of very low safety significance (Green) because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of problem identification and resolution in that the licensee failed to take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance [P.1(d)].

Inspection Report# : [2008003](#) (pdf)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: FIN Finding

Failure to Implement Appropriate Design and Configuration Control for the Unit Polar Crane

A self-revealed finding of very low significance (Green) with no associated violation of regulatory requirements was identified for the failure to implement appropriate design and configuration control for the Unit 2 polar crane upgrade project, which resulted in issues associated with reliable operation of the polar crane during the first reactor vessel head lift. Specifically, a lack of configuration control on the crane radio system resulted in a loss of radio communications during the initial reactor vessel head lift over the reactor vessel head stand, which resulted in unreliable crane operation. The licensee implemented remedial corrective actions to address the design issues with the polar crane bridge drive motors which resulted in unavailability at the beginning of the outage and ensured the radio receivers were appropriately configured and installed. The licensee performed a root cause analysis to determine the cause of the design and configuration control issues associated with the polar crane and developed additional corrective actions to address this performance deficiency.

The finding is more than minor because it is associated with the design control attribute of the Initiating Events Cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The finding is of very low safety significance (Green) because the finding did not meet the criteria for a Phase 2 or Phase 3 Analysis, as specified in Inspection Manual Chapter 0609 Appendix G, Attachment 1, Checklist 1, “Pressurized Water Reactor Hot Shutdown Operation: Time to Core Boiling < 2 Hours.” The inspectors did not identify a cross-cutting aspect associated with this finding.

Inspection Report# : [2008003](#) (pdf)

Mitigating Systems

Significance:  Mar 31, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Design Of Diesel Fuel Oil Tank Vent For Tornado Protection

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure to fully incorporate applicable tornado missile protection design requirements into the design of the 'A' train diesel fuel oil storage and transfer system. Specifically, the T-175A underground fuel oil storage tank vent line was found not capable of withstanding the effects of a design basis tornado missile strike without resulting in the subsequent loss of capability of the G 01 and G 02 emergency diesel generators to perform their safety functions. The licensee performed a prompt operability determination, concluded that the system was operable but non conforming, and put in place compensatory measures until the design deficiency had been resolved.

The finding was determined to be more than minor in accordance with Inspection Manual Chapter 0612, Appendix B, "Issue Screening," dated December 4, 2008, because the finding was associated with the Mitigating Systems Cornerstone attribute of Design Control and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, closure of the T 175A vent path would adversely affect the availability, reliability, and capability of the G 01 and G 02 emergency diesel generators to perform their safety-related functions. The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a for the Mitigating Systems Cornerstone, dated January 10, 2008. The finding was determined to be of very low safety significance (Green) because the finding was a design deficiency confirmed not to result in loss of operability. The inspectors did not identify a cross-cutting aspect associated with this finding as the performance deficiency occurred in the 1990s and was not indicative of current performance.

Inspection Report# : [2009002](#) (*pdf*)

Significance:  Mar 27, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Adequately Input Mechanism Operated Control Switch Failure Evaluations and Recommendations Into Maintenance Procedures

A finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the failure to have appropriate maintenance procedures for Mechanism Operated Cell (MOC) switches. Specifically, the licensee failed to have steps in the MOC switch preventative maintenance procedures for specific inspection and verification actions at the frequency, and with actions, recommended by causal evaluations and the vendor. The licensee entered this issue into the corrective action program and was evaluating corrective actions.

The finding was determined to be more than minor because if left uncorrected the issue would lead to a more significant safety concern. Specifically, the failure to identify degraded hardware on a MOC switch could lead to the failure of associated safety related equipment and alarms. The issue was of very low safety significance based on a Phase 1 screening in accordance with Inspection Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," dated January 10, 2008. This finding has a cross-cutting aspect in the area of problem identification, corrective action program component, because the licensee failed to thoroughly evaluate problems such that the resolutions addressed causes and extent of condition as necessary (P.1(c)).

Inspection Report# : [2009006](#) (*pdf*)

Significance:  Mar 27, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Inverter Maintenance Procedures Did Not Include Steps For Capacitor Replacement

. A finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to have appropriate maintenance procedures and work instructions in place for certain safety-related inverters.

Specifically, the licensee failed to have steps in the routine maintenance procedure (RMP) 9036 series maintenance procedures for periodic replacement of the electrolytic capacitors in the SCI-model inverters as recommended by the vendor. The licensee entered this issue into the corrective action program, scheduled replacement of the capacitors, and was further evaluating the vendor recommendation.

The finding was more than minor because, if left uncorrected, the finding would become a more safety significant concern. Not replacing the electrolytic capacitors in the SCI inverters based on the vendor recommended life could result in the failure of the inverter to perform their safety function and respond to initiating events. The issue was of very low safety significance based on a Phase 1 screening in accordance with Inspection Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," dated January 10, 2008. This finding had a cross-cutting aspect in the area of problem identification and resolution, corrective action program component, because the licensee failed to implement and institutionalize operating experience, including vendor recommendations, through changes to station procedures (P.2(b)).

Inspection Report# : [2009006](#) (*pdf*)

Significance: TBD Mar 09, 2009

Identified By: NRC

Item Type: AV Apparent Violation

Failure to Notify the NRC of a Permanent Illness or Disability of a Licensed Operator.

Prior to becoming a licensed reactor operator (RO) in 1999, a non-licensed operator notified the station's medical staff that he began taking a prescribed medication for a potentially disqualifying medical condition in 1993. The NRC was not notified of the senior reactor operator's (SRO's) potentially disqualifying medical condition until October 20, 2008. Title 10 CFR 50.74(c), "Notification of Change in Operator or Senior Operator Status," requires the licensee to notify the NRC within 30 days of the licensee being informed of a permanent change in a licensed operator's medical condition. The licensee should have notified the NRC of the operator's potentially disqualifying medical condition when the operator applied for an NRC operating license in 1999. The time period between May 1999 and November 2008 exceeded the 30-day notification requirement. The licensee conducted a review of all licensed operator medical records to determine the extent of condition and initiated other compensatory measures to prevent recurrence of this condition.

Because the issue affected the NRC's ability to perform its regulatory function it was evaluated using the traditional enforcement process. The finding was determined to be of low safety significance because the SRO was taking the medications as prescribed and had not made any operational errors during any emergency condition. The regulatory significance was important because plant staff failed to notify the NRC of a permanent disability or illness of an SRO within 30 days. This was preliminarily determined to be an apparent violation of 10 CFR 50.74(c). The cause of the apparent violation is related to the cross-cutting element of problem identification and resolution in the area of operating experience (P.2(b)).

Inspection Report# : [2009008](#) (*pdf*)

Significance: TBD Mar 09, 2009

Identified By: NRC

Item Type: AV Apparent Violation

Failure to Provide Complete Information to the NRC which Impacted a Licensing Decision.

Every six years an operator's NRC operating license must be renewed. When the licensee submits the request for license renewal, the licensee must certify to the NRC that the operator is medically capable of performing license duties. This is done by completing an NRC Form 396, "Certification of Medical Examination by Facility Licensee." When signed by senior station management, the NRC Form 396 certifies that an operator is able to perform operator duties. The form contains several standard license conditions that restrict operator activities to ensure their ability to perform license duties. In this senior reactor operator's (SRO's) case, the licensee certified to the NRC in a letter dated January 23, 2008, that the operator was capable of performing license duties with no restrictions. The licensee

provided incomplete and inaccurate information on the accompanying NRC Form 396 in that the licensee failed to inform the NRC that the SRO was taking medication for a potentially disqualifying medical condition so the NRC could properly restrict the SRO's operating license to have a "Must Take Medication as Prescribed to Maintain Qualifications" license restriction.

Because the issue affected the NRC's ability to perform its regulatory function, it was evaluated using the traditional enforcement process. The finding was determined to be of low safety significance because the SRO had taken medications as prescribed and had not made errors during any emergency condition prior to the license being amended. However, the regulatory significance was important because the incomplete and inaccurate information was provided under a signed statement to the NRC and impacted a licensing decision for the SRO. This was preliminarily determined to be an apparent violation of 10 CFR 50.9, "Completeness and Accuracy of Information." The cause of the apparent violation is related to the cross-cutting element of problem identification and resolution in the area of operating experience (P.2(b)).

Inspection Report# : [2009008](#) (pdf)

Significance:  Sep 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Have Adequate Maintenance Procedures for Service Water Pump Replacements

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the failure to properly rig and install the P-32E service water pump shaft on June 7, 2006. The bent pump shaft subsequently led to high pump vibrations and pump inoperability in excess of Technical Specification Action Condition completion time in February 2008. Specifically, the licensee determined that Routine Maintenance Procedure (RMP), RMP 9216-2, "Service Water Pump Removal, Installation, and Maintenance," lacked adequate installation and rigging instructions to ensure excessive force was not applied to the shaft during installation. As part of its corrective actions, the licensee revised the RMP to include proper installation and rigging instructions.

The finding was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of equipment performance, and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Tables 3b and 4a for the Mitigating Systems Cornerstone. The inspectors determined that the finding was of very low safety significance (Green) because the finding did not involve a design or qualification deficiency, there was no actual loss of safety function, no single train loss of safety function for greater than the technical specification allowed outage time, and no risk due to external events. The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance, resources component, because licensee procedures were not complete or adequate to ensure that the P-32E pump shaft was rigged and installed without damage to the shaft. [H.2(c)]

Inspection Report# : [2008004](#) (pdf)

Significance:  Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Equalizing Charge Voltage Not Bounded by Battery Room Hydrogen Generation Calculation

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, Design Control, was identified by the team for the failure to ensure that the design limit established in a design basis calculation, used to determine safety-related batteries hydrogen generation rate, bounded the value used in a maintenance procedure for a safety related component. During the inspection, the licensee evaluated and determined that the effect of the higher hydrogen gas generation did not have an impact on the operability of the batteries and the ventilation system.

The finding was greater than minor because the lack of adequate design control process resulted in increase of hydrogen generation levels and in a reasonable doubt of operability of the 125-Volt direct current system. The finding was determined to be of very low significance, because it was a design deficiency that did not result in actual loss of safety function. This finding does not have a cross-cutting aspect because it is not indicative of current performance.

Inspection Report# : [2008009](#) (pdf)

Significance:  Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Conservative Design Basis for Primary Auxiliary Building Heat-up

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, Design Control, was identified by the team for the failure to verify the accuracy of design using alternative or simplified calculational methods or by the performance of a suitable testing program. Specifically, the licensee used non-conservative field test data as a basis for the design temperatures given in the equipment qualification (EQ) manual for components in the auxiliary building, resulting in specified design temperatures for some safety related components that may be as much as approximately 40 degrees Fahrenheit less than calculated worst case accident condition temperatures. The licensee re-evaluated the consequences of the higher temperatures and concluded the equipment remained operable.

The finding was determined to be more than minor because, if the EQ design temperatures were left uncorrected, this deficiency could lead to inadequately qualified replacement parts or inadequately designed plant modifications in the future. The finding was determined to be of very low significance because, by the end of the inspection, the licensee was able to show that all affected components were capable of performing their safety related functions under the higher than previously anticipated temperatures. The team did not identify a cross-cutting aspect associated with this finding.

Inspection Report# : [2008009](#) (pdf)

Significance:  Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Ability to Transfer Fuel Oil Between EDG Fuel Oil Tanks T-175A/B Has Not Been Demonstrated by Testing

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XI, Test Control, was identified by the team for the failure to test the components used for transfer of fuel oil between two underground storage tanks that support emergency diesel generator (EDG) operation. Specifically, the licensee has not demonstrated the transfer of fuel between tanks T-175A and T-175B as credited in the Technical Specification (TS) Basis and Updated Safety Analysis Report. The licensee entered this issue into its corrective action and prepared to test these components.

This finding was determined to be more than minor because the failure to verify the transfer capability affected the ability to ensure emergency power availability for greater than two days. This finding was screened as very low safety significance because it was a deficiency that did not result in the loss of safety function. This finding does not have a cross-cutting aspect because it was not indicative of current performance.

Inspection Report# : [2008009](#) (pdf)

Significance:  Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

RHR Pump Suction Pressure Gages Repeatedly Found To Be Out Of Tolerance

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XII, Control of Measuring and Test Equipment, was identified by the team for the failure to correct a known trend of out of tolerance (OOT) test pressure gauge which were used in a critical In Service Test (IST) Program performance test of the residual heat removal (RHR) pumps for Units 1 and 2. The licensee entered this issue into its

corrective action and confirmed operability of the RHR pumps.

The finding was determined to be more than minor because, if left uncorrected, it could become a more significant safety concern. Specifically, since the cause of the high frequency OOT conditions for these pressure gauges has not been identified, it could be assumed that this instrumentation could be out of tolerance in a non-conservative manner. The finding was determined to be of very low significance because the comprehensive IST performance test conducted during the 2008 refueling outage showed that the actual test results were within the acceptable band, thereby confirming that operability and functionality of the RHR pumps had not been lost. This finding has a cross-cutting aspect in the area of Human Performance, Resources because the licensee did not ensure adequate resources were available to minimize long-standing equipment issues (H.2(a)).

Inspection Report# : [2008009](#) (pdf)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Address Sprinkler Head Obstructions in 'B' Train EDG Rooms

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of License Condition 4.F for the failure to address fire suppression sprinkler head obstructions in the 'B' train emergency diesel generator (EDG) rooms. The inspectors identified that five sprinkler heads were obstructed in the 'B' train EDG rooms. National Fire Protection Association (NFPA) 13-1991, "Installation of Sprinkler Systems" was the applicable standard for sprinkler systems installed in the two rooms. The inspectors determined that failure to address sprinkler head obstructions was contrary to NFPA 13-1991 and was a performance deficiency.

The finding was more than minor because the failure to address sprinkler head obstructions was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Factors (Fire) and affected the cornerstone objective of ensuring the capability of systems that respond to initiating events. Specifically, the identified obstructions to sprinkler heads would affect the sprinkler spray patterns and distribution thereby impacting the sprinkler systems capability to control a fire. In accordance with Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," and IMC 0609, Appendix F, "Fire Protection Significance Determination Process [SDP]," the inspectors considered the finding to represent a moderate degradation of the water based suppression system for both rooms. As such, the inspectors performed a Phase 2 SDP. The inspectors concluded that potential fire scenarios associated with the finding were effectively FDS0 fire scenarios as described in Section 2.2 of IMC 609, Appendix F, and that the issue was of very low safety significance (i.e., Green). The inspectors did not identify a cross-cutting aspect associated with this finding.

Inspection Report# : [2008003](#) (pdf)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Manage Online Risk for Breaker 1B52-16C Work

The inspectors identified a finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50.65(a)(4), "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," when the licensee failed to adequately manage the risk associated with work on the 480-volt alternating current breaker 1B52 16C, coincident with a large number of other out-of-service components, which resulted in an unplanned risk condition for Unit 1 without the appropriate risk management actions. Specifically, the licensee incorrectly assumed that planned work on breaker 1B52 16C did not render the breaker unavailable, and that the breaker was not utilized in Modes 1, 2, or 3. Consequently, the component was not factored into the Safety Monitor online risk model. However, breaker 1B52 16C was in fact unavailable and also utilized in abnormal operating procedures for Modes 1, 2 and 3. Therefore, unavailability of the breaker was required to have been factored into Safety Monitor with appropriate risk management actions taken. The licensee took corrective actions to perform an apparent cause evaluation that identified the apparent cause of the issue and recommended a number of corrective actions to address

the procedural and human performance deficiencies that were identified.

The finding was greater than minor because the finding was based on incorrect assumptions that changed the outcome of the risk assessment. The inspectors evaluated this finding using the Appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process" worksheets of Inspection Manual Chapter 0609 because the finding is a maintenance risk assessment issue. Flowchart 1, "Assessment of Risk Deficit," requires the inspectors to determine the risk deficit associated with this issue. This finding was determined to be of very low safety significance because the incremental core damage probability deficit was less than 1E-6. The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance. Specifically, the licensee failed to use conservative assumptions in decision-making and adopt a requirement to demonstrate that the proposed action was safe in order to proceed rather than a requirement to demonstrate that it is unsafe in order to disapprove the action [H.1(b)].

Inspection Report# : [2008003](#) (pdf)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedures for DY-0C Inverter Maintenance

A self-revealing finding of very low safety significance (Green) and an associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for the failure to have appropriate maintenance procedures and work instructions in place to identify improperly installed components prior to the attempted restoration of the DY-0C white channel instrument inverter. Specifically, the routine maintenance procedure did not contain instructions to check for direct current (DC) grounds following maintenance and prior to restoration, which allowed a ground to go undetected and cause a number of unplanned Technical Specification Action Condition (TSAC) entries as well as the unplanned inoperability of the G-01 and G-02 emergency diesel generators and the 2PI 9046 containment pressure indicator. At the end of the inspection period, the licensee continued to perform a causal evaluation and develop additional long-term corrective actions.

The finding was more than minor because it is associated with the Procedure Quality attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors evaluated the finding using Inspection Manual Chapter 0609, Appendix A, Attachment 1, "Significance Determination of Reactor Inspection Findings for At-Power Situations," dated January 10, 2008. The inspectors determined that the finding was of very low safety significance (Green) because the finding did not involve a design or qualification deficiency, there was no actual loss of safety function, no single train loss of safety function for greater than the technical specification (TS) allowed outage time, and no risk due to external events. The inspectors also determined that the finding had a cross-cutting aspect in the area of human performance. Specifically, procedures were not complete or adequate to ensure that installation errors would be detected prior to restoration of the DY-0C inverter [H.2(c)].

Inspection Report# : [2008003](#) (pdf)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedures for Reduced Inventory With an Intact Reactor Coolant System

A finding of very low safety significance and associated Non-Cited Violation of TS 5.4.1, "Procedures," was identified by the inspectors for the failure to protect all of the safety equipment necessary for safe shutdown while in reduced inventory with the reactor coolant system (RCS) intact. Specifically, the licensee failed to ensure that an auxiliary feedwater source and steam generator (SG) were available for decay heat removal when a reduced inventory condition was entered and the RCS was intact. The licensee's responses to Generic Letter 88-17, "Loss of Decay Heat Removal," indicated that the first drain of the RCS to reduced inventory following shutdown could be accomplished with the RCS intact and reflux cooling (with a SG and auxiliary feedwater source) as an alternate decay heat removal path. The licensee was performing a causal evaluation of this issue and developing corrective actions at the end of the assessment period.

The finding was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of human performance and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance (Green) because the finding did not meet the criteria for a Phase 2 or Phase 3 Analysis, as specified in Inspection Manual Chapter 0609 Appendix G, Attachment 1, Checklist 3. The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance. Specifically, the licensee failed to ensure that procedures were adequate and accurate to assure nuclear safety [H.2(c)].

Inspection Report# : [2008003](#) (*pdf*)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain RCS Within Procedurally Allowed Level During Reduced Inventory

A finding of very low safety significance and associated Non-Cited Violation of TS 5.4.1, "Procedures," was identified by the inspectors for the failure to implement operations procedures to remain above the ¾ pipe level indications for draining the Reactor Coolant System (RCS) while in reduced inventory. Specifically, during the second planned orange risk condition of the Unit 2 refueling outage to facilitate removal of the Steam Generator nozzle dams, operators drained the RCS below the procedurally required 22 percent level, as indicated by the most conservative reactor vessel level indication. The licensee took immediate corrective actions to address the issue and was performing a causal evaluation and developing corrective actions at the end of the assessment period.

The finding was determined to be more than minor because it is associated with the Mitigating Systems Cornerstone attribute of human performance and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance (Green) because the finding did not meet the criteria for a Phase 2 or Phase 3 Analysis, as specified in Inspection Manual Chapter 0609 Appendix G, Attachment 1, Checklist 3. The inspectors also determined that the finding has a cross cutting aspect in the area of human performance. Specifically, the licensee failed to use conservative assumptions in decision-making and adopt a requirement to demonstrate that the proposed action was safe in order to proceed rather than a requirement to demonstrate that it is unsafe in order to disapprove the action [H.1(b)].

Inspection Report# : [2008003](#) (*pdf*)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Maintenance Procedure for Turbine-Driven Auxiliary Feedwater Pump 2P-29

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the failure to ensure that procedures associated with the maintenance of the turbine for the turbine-driven auxiliary feedwater pump were appropriate to the circumstances. Specifically, the licensee's maintenance procedures did not address the following significant issues: 1) proper application of sealant material used on turbine casing joints; 2) proper cure time of sealant material used on turbine casing joints; 3) prescribed methods for tightening of the oil deflector ring set screw was not discussed; and 4) acceptable clearances between the turbine shaft and the inner diameter of the oil deflector ring were not specified. The licensee took immediate corrective actions to address the issue, conducted a root cause evaluation, and developed corrective actions to address the root causes, contributing causes, and extent of condition associated with this finding.

The finding was more than minor because it affected the Mitigating Systems Cornerstone attributes of equipment performance availability and reliability, and maintenance procedure quality, as well as the cornerstone objective of ensuring the availability and reliability of systems. The inspectors evaluated the finding in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 Initial Screening and Characterization of Findings." The inspectors determined this finding was not a design qualification deficiency

resulting in a loss of function per Generic Letter 91-18, did not represent an actual loss of safety function of a system or train of equipment, and was not potentially risk-significant due to a seismic, fire, flooding, or severe weather initiating event. Therefore, the finding was considered to be of very low safety significance (Green). The primary cause of this finding was related to a cross-cutting aspect in the area of human performance because the licensee failed to ensure that procedures were adequate and accurate to assure nuclear safety [H.2(c)].

Inspection Report# : [2008003](#) (*pdf*)

Barrier Integrity

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Conservative Low Temperature Overpressure Protection Setpoints

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” was self revealed upon discovery of the use of a non-conservative setpoint for the Low Temperature Overpressure Protection (LTOP) systems for Units 1 and 2. Specifically, licensee calculation 2000-0001, “RCS [Reactor Coolant System] Pressure and Temperature Limits and Low Temperature Overpressure Protection Setpoints Applicable through 32.2 EFPY[Effective Full Power Years] – Unit 1 and 34.0 EFPY – Unit 2,” established an LTOP setpoint of 500 pounds per square inch – gauge (psig). However, by using the setpoint calculation methodology of 10 CFR Part 50, Appendix G, the resulting LTOP setpoint was calculated to be 420 psig. Therefore, the 500 psig setpoint was found to be non conservative and the LTOP systems were declared inoperable. As part of its corrective actions, the licensee revised the LTOP setpoints from 500 psig to 420 psig and made changes to operating procedures to delineate the acceptable operating conditions of the reactor coolant pumps and charging pumps during low temperature conditions.

The finding was determined to be more than minor because the finding was associated with the human performance attribute of the Barrier Integrity Cornerstone and affected the cornerstone objective of providing reasonable assurance that physical design barriers, such as containment, protect the public from radionuclide releases caused by accidents or events. Specifically, the non-conservative LTOP setpoint provided reasonable doubt that the integrity of the RCS pressure boundary would be maintained during low temperature conditions. The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, “Significance Determination Process,” Attachment 0609.04, “Phase 1 - Initial Screening and Characterization of Findings,” Table 4a for the Barrier Integrity Cornerstone, dated January 10, 2008. The inspectors determined that the finding was of very low safety significance (Green) because all of the questions in the containment barrier column of Table 4a were answered NO and the actual setpoint of the power operated relief valves was 415 psig, below the revised LTOP setpoint. The inspectors also determined that the finding has a cross cutting aspect in the area of problem identification and resolution, corrective action program component, because personnel did not use a low threshold for identifying issues [P.1(a)].

Inspection Report# : [2008005](#) (*pdf*)

Significance:  Sep 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Procedures for Use of the Containment Hatch Doors

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” was self revealed for the failure to follow system operating procedure requirements to visually inspect and remove debris from the Unit 1 lower containment airlock door sealing surface upon exit from the airlock, which resulted in the failure of the airlock to meet its post maintenance testing acceptance criteria on September 9, 2008. As part of its corrective actions, the licensee reinforced with the hatch operators the procedural requirements.

The finding was determined to be more than minor because the finding was associated with the Barrier Integrity Cornerstone attribute of human performance and affected the cornerstone objective of providing reasonable assurance that physical design barriers, such as containment, protect the public from radionuclide releases caused by accidents or events. The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a for the Barrier Integrity Cornerstone. The inspectors determined that the finding was of very low safety significance because all of the questions in the containment barrier column of Table 4a were answered NO. The inspectors also determined that this finding has a cross-cutting aspect in the area of human performance, work practices component, because personnel did not follow procedures. [H.4(b)]

Inspection Report# : [2008004](#) (*pdf*)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain Control of Containment Penetration Status

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the failure to maintain adequate control over the status of containment penetrations during the Unit 2 core reload evolution. Specifically, the licensee failed to adequately track the open and closed status of two isolation valves, such that an unexpected pathway from containment to the atmosphere existed. The containment closure checklist indicated that the valves were closed and secured; however, they were in fact open during a period of fuel movement inside containment. At the end of the inspection period, the licensee continued to perform a causal evaluation and develop additional long-term corrective actions.

The finding was determined to be more than minor because the failure to maintain the accuracy of the containment closure checklist affected the Barrier Integrity Cornerstone attribute of configuration control and affected the cornerstone objective of providing reasonable assurance that physical design barriers, such as containment, protect the public from radionuclide releases caused by accidents. Specifically, in the event of a fuel handling accident inside containment, the unknown position of these two vent valves could have resulted in the inability to restore containment closure in a timely manor. The finding is of very low safety significance (Green) because the finding did not meet the criteria for a Phase 2 or Phase 3 Analysis, as specified in Inspection Manual Chapter 0609 Appendix G, Attachment 1, Checklist 4. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance in that the licensee failed to use conservative assumptions in decision-making [H.1(b)].

Inspection Report# : [2008003](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Adequate Total Effective Dose Equivalent ALARA Evaluations

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR 20.1501 was identified by the inspectors for the failure to perform an adequate survey (evaluation) to determine the use of respiratory protection equipment and/or engineering controls so as to maintain the total effective dose equivalent (TEDE) as-low-as-is-

reasonably achievable (ALARA). Specifically, TEDE ALARA evaluations completed in April 2008 prior to steam generator (SG) maintenance and maintenance support activities did not adequately assess the planned use of engineering controls to reduce the concentration of radioactive material in air. As a result, respirators were specified to be used when not warranted based on the engineering controls to be implemented. As corrective actions, the licensee planned to reevaluate its TEDE ALARA evaluations for pending SG work activities, planned to develop a procedure specific to the performance of these evaluations, and was considering the need for supervisory or health physics staff review of these evaluations. The licensee entered the issue into its corrective action program as action request (AR) 01125284.

The finding was determined to be more than minor because it impacted the Occupational Radiation Safety Cornerstone attribute of program and process and potentially affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation, in that not performing adequate evaluations to determine the use of respiratory protection equipment consistent with the engineering controls for the work would result in additional dose to workers. The finding was determined to be of very low safety significance because it was not an ALARA planning issue, there was no overexposure nor potential for overexposure, and the licensee's ability to assess dose was not compromised. The finding was determined to have a cross-cutting aspect in the resource component of the human performance area, because procedures were not adequate to ensure that TEDE ALARA evaluations were performed properly [H.2(c)].

Inspection Report# : [2008003](#) (*pdf*)

Public Radiation Safety

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Establish Written Procedures to Implement the Effluent Control Program

The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation of Technical Specification 5.4.1 for the failure to establish written procedures to implement the radioactive effluent control program as provided in the Offsite Dose Calculation Manual to ensure effluent sample analyses satisfied required detection criteria. Specifically, no process was established to ensure that effluent analysis capabilities for chemistry analytical equipment were periodically demonstrated to meet required lower levels of detection (LLDs). As corrective actions, the licensee subsequently performed LLD determinations for its analytical equipment (gamma spectroscopy system) and developed procedures to ensure LLDs were periodically verified consistent with industry standards.

The finding was determined to be more than minor because it affected the program and process attribute of the Public Radiation Safety Cornerstone and affected the cornerstone objective of ensuring adequate protection of public health and safety from exposure to radioactive material released into the public domain. Specifically, given the instability in the licensee's gamma spectroscopy system since 2007, as evidenced by repetitive performance check failures, the ability of the equipment to achieve required LLDs could have been impacted or necessitated changes in analysis parameters (such as count times) resulting in non-conservative effluent quantification. The inspectors determined that the finding was of very low safety significance (Green) because it did not represent a substantial failure to implement the effluent release program or result in public dose that exceeded specified criterion. The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance, resources component, in that the licensee failed to develop procedures to fully implement its effluent program as provided in the Offsite Dose Calculation Manual (ODCM) [H.2(c)].

Inspection Report# : [2008005](#) (*pdf*)

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: N/A Mar 27, 2009

Identified By: NRC

Item Type: FIN Finding

Biennial Problem Identification and Resolution Report Summary

Based on the samples selected for review, the inspectors concluded that implementation of the corrective action program (CAP) was adequate. The inspectors noted that the licensee has a sufficiently low threshold for identifying issues and entering them in the CAP and established additional directions to ensure a lower threshold was consistently used. Prioritization of items entered in the CAP was adequate with recent improvements that have reduced the action item backlog and allowed the station to focus on higher priority items. The inspectors noted that the licensee entered operating experience into the CAP but did not always fully evaluate the information for applicability to station components. Audits and self assessments were determined to be performed at an appropriate level to identify deficiencies. On the basis of licensee self-assessments and interviews conducted during the inspection, workers at the site expressed freedom to raise safety concerns

Inspection Report# : [2009006](#) (pdf)

Significance: SL-IV Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a 10 CFR 50.59 Evaluation for Changes to SI System Valve Back-Seating Procedures

The inspectors identified a Severity Level IV Non-Cited Violation, having very low safety significance, of 10 CFR 50.59, Changes, Tests, and Experiments, for the licensee's failure to provide documented basis for determining that changes to procedures did not require prior NRC approval. Specifically, the licensee incorrectly concluded that a 10 CFR 50.59 screening was not required when procedures were revised to eliminate the practice of back-seating normally open gate/globe valves even though the Final Safety Analysis Report stated that normally open gate/globe valves in the Safety Injection (SI) system are back-seated to limit valve stem leakage.

The finding was determined to be more than minor because the team could not reasonably determine that the change to the plant procedure which had removed a barrier to release radioactivity into the auxiliary building would not have ultimately required NRC prior approval. The finding was determined to be of very low safety significance because it only represented a degradation of the radiological barrier function provided for the auxiliary building. This finding has a cross-cutting aspect in the area of Human Performance, Decision Making, because during performance of the 10 CFR 50.59 applicability determination for a procedural change, in March 2008, the licensee made an inappropriate decision by failing to require a screen or full 50.59 evaluation (H.1.(a)).

Inspection Report# : [2008009](#) (pdf)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Ensure Completion of New Supervisory Training

A Non-Cited Violation of Confirmatory Order EA 06-178 having very low safety significance (Green) was identified by the inspectors for the licensee's failure to ensure that new employees holding supervisory positions and higher were trained on safety conscious work environment (SCWE) principles within nine months of their hire dates, unless they have had the same or equivalent SCWE training within the previous two years of the hire dates. Specifically, the inspectors identified that four new employees holding supervisory positions for greater than nine months of their hire dates as supervisors, had not received SCWE training, nor the same or equivalent training within the previous two years. At the end of the inspection period, the licensee was performing a causal analysis and developing corrective actions to address the issues identified by the inspectors.

The finding was determined to be more than minor because if left uncorrected the finding would become a more significant safety concern. The finding would have been greater than very low significance had an action by the new supervisor resulted in a violation of 10 CFR 50.7 against an employee. The finding is not suitable for Significance Determination Process evaluation, but has been reviewed by NRC management and is determined to be a finding of very low safety significance. The inspectors determined that the finding had a cross-cutting area aspect in the area of human performance. Specifically, the licensee failed to ensure that supervisory and management oversight of the Confirmatory Order actions, such that nuclear safety was supported [H.4(c)].

Inspection Report# : [2008003](#) (*pdf*)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: FIN Finding

Inadequate Corrective Actions to Address Licensee Action Plans

A finding of very low safety significance was identified by the inspectors for the failure to take timely and effective corrective actions to address four of nine nuclear safety culture action plans and the “quick hitter” plans. Specifically, the licensee developed the action plans and “quick hitter” plans in response to the Confirmatory Order in the first quarter of 2007, to correct longstanding safety culture issues identified by the licensee’s comprehensive safety culture assessments conducted in 2004 and 2006. At the end of the inspection period, the licensee was performing a causal analysis and developing corrective actions to address the issues identified by the inspectors.

The finding was determined to be more than minor because if left uncorrected the finding would become a more significant safety concern. The finding would have been greater than very low significance had the failure to take corrective actions resulted in a more safety significant issue as a result of the incomplete action plans. The finding is not suitable for Significance Determination Process evaluation, but has been reviewed by NRC management and is determined to be a finding of very low safety significance. The inspectors determined that the finding had a cross-cutting area aspect in the area of problem identification and resolution. Specifically, the licensee failed to take appropriate corrective actions to address safety issues in a timely manner, commensurate with their safety significance and complexity [P.1(d)].

Inspection Report# : [2008003](#) (*pdf*)

Significance: N/A Dec 31, 2006

Identified By: NRC

Item Type: AV Apparent Violation

NRC to Review Items in Confirmatory Order Dated January 3, 2007, for Employment Discrimination Settlement.

In a letter dated January 3, 2007 (ADAMS Accession Number ML063630336), the NRC issued a Confirmatory Order to the licensee as part of a settlement agreement through the NRC’s Alternative Dispute Resolution (ADR) process. The NRC investigated an alleged violation of 10 CFR 50.7, “Employee Protection,” to determine whether a senior reactor operator was the subject of retaliation for raising a nuclear safety concern in the licensee’s corrective action program. This issue was resolved through the NRC’s ADR program and will be tracked as Apparent Violation (AV) 05000266/2006013-05; 05000301/2006013-05 pending NRC review of the licensee’s completion of items specified in the Confirmatory Order.

NOTE: All of the specific items from this AV are also tracked as ORDER items in RPS/IR.

Inspection Report# : [2006013](#) (*pdf*)

Inspection Report# : [2008003](#) (*pdf*)

Last modified : May 28, 2009

Point Beach 2

2Q/2009 Plant Inspection Findings

Initiating Events

Significance:  Mar 27, 2009

Identified By: NRC

Item Type: FIN Finding

Failure To Adequately Control High Winds/Tornado Hazards

A finding of very low safety significance was identified by the inspectors for the licensee's failure to maintain control over the proper storage and placement of materials, within the risk significant areas of the outdoors protected area, that were classified as high winds/tornado hazards in accordance with station procedures PC 99, "Tornado Hazards Inspection Checklist," and NP 1.9.6, "Plant Cleanliness and Storage." Specifically, these unsecured items were identified near the Unit 1 and Unit 2 main transformer lines, auxiliary transformers, and the G 03/G 04 emergency diesel generator building. Once notified, the licensee removed or secured the materials appropriately and entered the issue into its corrective action program. At the end of the inspection period, the licensee continued to perform a root cause evaluation and develop long-term corrective actions.

The finding was determined to be more than minor because if left uncorrected, the loose items would become a more significant safety concern. The inspectors evaluated the finding using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," dated January 10, 2008. The finding is of very low safety significance (Green) because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance, work practices component, because the licensee failed to ensure adequate supervisory and management oversight of the implementation and follow through of the corrective actions from previous related issues (H.4(c)).

Inspection Report# : [2009006](#) (*pdf*)

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Inspection Procedure for Containment Polar Crane Structures

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self revealed for the failure to have inspection procedures appropriate to the circumstances for the Unit 1 and Unit 2 containment polar cranes and their integral support structures. Specifically, station routine maintenance procedure 1(2) RMP 9118 1(2), "Containment Building Crane OSHA Operability Inspections," did not require that the polar crane lateral restraint bolts be inspected to ensure that they do not show signs of degradation or movement, e.g., flaking paint or being backed out of position. As a result, improperly installed bolts went undiscovered by the licensee until a failed bolt was found on October 16, 2008, lying on the containment floor. The discovery prompted further inspection of the entire crane support structure and led to the de rating of the polar crane's lifting capacity from 100 tons to 40 tons. In addition to conducting an extent-of-condition inspection, the licensee entered the issue into its corrective action program (CAP), replaced all degraded bolts, and performed an apparent cause evaluation.

The finding was determined to be more than minor because the finding was associated with the Initiating Events Cornerstone attribute of equipment performance and affected the cornerstone objective of limiting the likelihood of those events that challenge critical safety functions during shutdown. Specifically, failing to visually inspect critical bolting locations on crane supports could have allowed the use of the polar crane for heavy load lifts while in a degraded condition, increasing the likelihood of a load drop. The inspectors determined that the finding could be evaluated in accordance with Inspection Manual Chapter 0609, Appendix G, "Shutdown Operations SDP

[Significance Determination Process],” dated February 28, 2005. The issue did not need a quantitative assessment and screened as Green using Figure 1. This finding has a cross-cutting aspect in the area of human performance, resources, for the failure to have complete and accurate procedures in place. Specifically, the vague and insufficient detail in the crane inspection procedures contributed to the licensee’s failure to perform an adequate inspection to identify degraded components prior to their failure [H.2(c)].

Inspection Report# : [2008005](#) (pdf)

Mitigating Systems

Significance:  Jun 30, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Seismic Assessment Of Temporary Cable Installations Above Motor-Driven Auxiliary Feedwater Pumps

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” for the failure of the licensee’s modification process to ensure that new 4160-volt cables installed for proposed auxiliary feedwater (AFW) pump motor replacements were installed in accordance with applicable regulatory requirements. Specifically, no seismic design evaluation was completed prior to the installation of the cable coils suspended above the existing motor-driven AFW pumps for over 6 months. In response to the issue, the licensee installed a new restraint designed to meet seismic criteria and completed calculations that showed the as-left condition of the modification did not challenge operability.

This performance deficiency was more than minor because it was associated with the Mitigating System Cornerstone attribute of design control and adversely affected the cornerstone objectives of ensuring the availability, reliability, and capability of systems to respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, once identified, the modification required rework to comply with applicable design requirements. The inspectors determined the finding was of very low safety significance (Green) because the issue did not result in the actual loss of a safety function. The inspectors also determined the finding has a cross cutting aspect in the area of human performance, work control, because the licensee failed to incorporate risk insights and planned contingencies into work plans (H.3(a)).

Inspection Report# : [2009003](#) (pdf)

Significance:  Jun 30, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Inadequate Work Instructions And Procedures For 2P-11B Component Cooling Water Pump Maintenance

A finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” was self revealed for the failure to have adequate work instructions and procedures in place for the March 2009 repair of the 2P 11B component cooling water (CCW) pump. Specifically, the work instructions did not contain sufficient guidance to ensure the proper installation, alignment, and adequacy of material conditions for reuse, of critical pump components. As a result, the CCW pump was returned to service, while still in a degraded state, and required an additional entry into a technical specification action condition 2 weeks later for unplanned corrective maintenance to replace components and repair an oil leak. In response to the issues, the licensee overhauled the pump and performed an apparent cause evaluation, which identified additional long term corrective actions.

The finding was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the CCW pump was degraded with an oil leak from the inboard bearing motor side

oil seal and may not have been able to fulfill the 30-day mission time of the pump. The inspectors determined that the finding was of very low safety significance (Green) because the finding did not involve a design or qualification deficiency, did not represent an actual loss of safety function, or represent a single train loss of safety function for greater than the Technical Specification-allowed outage time, and was not potentially risk-significant for external events. The inspectors also determined that this finding has a cross-cutting aspect in the area of human performance, resources, because the level of training provided to the station personnel limited their ability to identify technical procedural deficiencies encountered during pump maintenance (H.2(b)).

Inspection Report# : [2009003](#) (pdf)

Significance:  Jun 30, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Conservative Technical Specification Limit Value For The 48-Hour Diesel Fuel Oil Storage Volume

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," involving the diesel fuel oil storage volume for the emergency diesel generators (EDGs). Specifically, the licensee failed to account for the fuel consumption of a second EDG when establishing the value for the Technical Specification limit for the 48-hour diesel fuel oil storage volume. In response to the issue, the licensee implemented compensatory actions to maintain an adequate fuel volume.

This performance deficiency was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring availability of the EDG to respond to initiating events to prevent undesirable consequences. This finding was of very low safety significance (Green) because the inspectors determined that the finding was a design deficiency confirmed not to result in loss of operability or functionality and the finding screened as Green using the Significance Determination Process Phase 1 screening worksheet. The inspectors did not identify a cross cutting aspect associated with this finding because the performance deficiency occurred many years ago.

Inspection Report# : [2009003](#) (pdf)

Significance:  Jun 30, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Work Instructions For South Service Water Header Work

. The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criteria V, "Instructions, Procedures and Drawings," for the failure to have work instructions and procedures commensurate with the risk associated with maintenance on the south service water (SW) system header. Specifically, the licensee did not have work instructions and procedures that assigned appropriate operator actions and contained contingency plans to rapidly restore the header to service if directed by the shift manager. The licensee entered this issue into the corrective action system and made procedure changes for work affecting the operability of a SW header.

This finding was determined to be more than minor because the finding was associated with the Mitigating System Cornerstone attribute of procedure quality and adversely affected the cornerstone objectives of ensuring the availability, reliability, and capability of systems to respond to initiating events to prevent undesirable consequences. Specifically, the work instructions for the maintenance activity did not incorporate the risk associated with the loss of all SW, since this system is the only safety-related system that provides cooling water to plant systems required to respond to initiating events. The inspectors determined the finding to be of very low safety significance (Green) because the issue did not result in the actual loss of a safety function. The inspectors also determined the finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to incorporate risk insights and planned contingencies into work plans (H.3(a)).

Inspection Report# : [2009003](#) (pdf)

G**Significance:** Mar 31, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Design Of Diesel Fuel Oil Tank Vent For Tornado Protection

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure to fully incorporate applicable tornado missile protection design requirements into the design of the 'A' train diesel fuel oil storage and transfer system. Specifically, the T-175A underground fuel oil storage tank vent line was found not capable of withstanding the effects of a design basis tornado missile strike without resulting in the subsequent loss of capability of the G 01 and G 02 emergency diesel generators to perform their safety functions. The licensee performed a prompt operability determination, concluded that the system was operable but non conforming, and put in place compensatory measures until the design deficiency had been resolved.

The finding was determined to be more than minor in accordance with Inspection Manual Chapter 0612, Appendix B, "Issue Screening," dated December 4, 2008, because the finding was associated with the Mitigating Systems Cornerstone attribute of Design Control and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, closure of the T 175A vent path would adversely affect the availability, reliability, and capability of the G 01 and G 02 emergency diesel generators to perform their safety-related functions. The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a for the Mitigating Systems Cornerstone, dated January 10, 2008. The finding was determined to be of very low safety significance (Green) because the finding was a design deficiency confirmed not to result in loss of operability. The inspectors did not identify a cross-cutting aspect associated with this finding as the performance deficiency occurred in the 1990s and was not indicative of current performance.

Inspection Report# : [2009002](#) (*pdf*)**G****Significance:** Mar 27, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Adequately Input Mechanism Operated Control Switch Failure Evaluations and Recommendations Into Maintenance Procedures

A finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the failure to have appropriate maintenance procedures for Mechanism Operated Cell (MOC) switches. Specifically, the licensee failed to have steps in the MOC switch preventative maintenance procedures for specific inspection and verification actions at the frequency, and with actions, recommended by causal evaluations and the vendor. The licensee entered this issue into the corrective action program and was evaluating corrective actions.

The finding was determined to be more than minor because if left uncorrected the issue would lead to a more significant safety concern. Specifically, the failure to identify degraded hardware on a MOC switch could lead to the failure of associated safety related equipment and alarms. The issue was of very low safety significance based on a Phase 1 screening in accordance with Inspection Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," dated January 10, 2008. This finding has a cross-cutting aspect in the area of problem identification, corrective action program component, because the licensee failed to thoroughly evaluate problems such that the resolutions addressed causes and extent of condition as necessary (P.1(c)).

Inspection Report# : [2009006](#) (*pdf*)**G****Significance:** Mar 27, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Inverter Maintenance Procedures Did Not Include Steps For Capacitor Replacement

. A finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to have appropriate maintenance procedures and work instructions in place for certain safety-related inverters. Specifically, the licensee failed to have steps in the routine maintenance procedure (RMP) 9036 series maintenance procedures for periodic replacement of the electrolytic capacitors in the SCI-model inverters as recommended by the vendor. The licensee entered this issue into the corrective action program, scheduled replacement of the capacitors, and was further evaluating the vendor recommendation.

The finding was more than minor because, if left uncorrected, the finding would become a more safety significant concern. Not replacing the electrolytic capacitors in the SCI inverters based on the vendor recommended life could result in the failure of the inverter to perform their safety function and respond to initiating events. The issue was of very low safety significance based on a Phase 1 screening in accordance with Inspection Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," dated January 10, 2008. This finding had a cross-cutting aspect in the area of problem identification and resolution, corrective action program component, because the licensee failed to implement and institutionalize operating experience, including vendor recommendations, through changes to station procedures (P.2(b)).

Inspection Report# : [2009006](#) (*pdf*)

Significance: SL-III Mar 09, 2009

Identified By: NRC

Item Type: VIO Violation

Failure to Notify NRC of Licensed Operator Medical Restrictions in accordance with 10 CFR 50.9 and 55.23.

During a U.S. Nuclear Regulatory Commission (NRC) inspection conducted on November 25, 2008 through March 9, 2009, violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violations are listed below:

1. Title 10 CFR 50.74(c) requires that each licensee notify the appropriate NRC Regional Administrator within 30 days of a permanent disability or illness, as described in 10 CFR 55.25, of a licensed operator or a senior operator. Contrary to the above, from May 1999 until October 20, 2008, a period greater than 30 days, the licensee failed to notify the NRC Region III Regional Administrator of a permanent disability or illness of a licensed operator. Specifically, the licensee was informed in February 1993 that the non-licensed operator was taking prescribed medication for hypertension, a permanent disability or illness. The non-licensed operator applied for an NRC operating license in May 1999. The NRC issued the operator a reactor operator license August 27, 1999, and a senior reactor operator license on February 22, 2002, with no restrictions. The licensee did not inform the NRC of the operator's medical condition until October 20, 2008.

2. Title 10 CFR 50.9 requires, in part, that information provided to the Commission by an applicant for a license or by a licensee or information required by statute or by the Commission's regulations, Orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects. Title 10 CFR 55.23 requires, in part, that to certify the medical fitness of the applicant, an authorized representative of the facility licensee shall complete and sign NRC Form 396, "Certification of Medical Examination by Facility Licensee." The NRC Form 396, when signed by an authorized representative of the facility licensee, certifies that a physician conducted a medical examination of the applicant and that the guidance contained in American National Standards Institute/American Nuclear Society (ANSI/ANS) Standard 3.4-1996, "Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants" was followed in conducting the examination and making the determination of medical qualification. The ANSI/ANS 3.4-1996, Section 5.3, provides, in part, that the presence of certain medical conditions, unless adequately compensated by the methods specified in Subsections 5.3.1 through 5.3.9, shall disqualify the individual.

Contrary to the above, on January 28, 2008, the facility licensee provided information to the NRC that was not complete and accurate in all material respects. Specifically, the licensee submitted an NRC Form 396 for renewal of a senior reactor operator's license and the NRC Form 396 certified that the applicant met the medical requirements of ANSI/ANS 3.4 1996 with no restrictions. However, In February 1993, the operator was prescribed medication to adequately compensate for a disqualifying medical condition. The certification by the senior licensee facility representative was material to the NRC because the NRC relied upon this certification to renew the senior reactor

operator's license pursuant to 10 CFR Part 55 when the license should have been modified with a restriction that the senior reactor operator was required to take medication as prescribed to maintain his qualification.

This is a Severity Level III problem (Supplement VII).

The associated two AVs 2009-008-01 and 2009-008-02 were combined to form this one SLiii Problem.

Inspection Report# : [2009009](#) (*pdf*)

Significance:  Sep 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Have Adequate Maintenance Procedures for Service Water Pump Replacements

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the failure to properly rig and install the P-32E service water pump shaft on June 7, 2006. The bent pump shaft subsequently led to high pump vibrations and pump inoperability in excess of Technical Specification Action Condition completion time in February 2008. Specifically, the licensee determined that Routine Maintenance Procedure (RMP), RMP 9216-2, "Service Water Pump Removal, Installation, and Maintenance," lacked adequate installation and rigging instructions to ensure excessive force was not applied to the shaft during installation. As part of its corrective actions, the licensee revised the RMP to include proper installation and rigging instructions.

The finding was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of equipment performance, and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Tables 3b and 4a for the Mitigating Systems Cornerstone. The inspectors determined that the finding was of very low safety significance (Green) because the finding did not involve a design or qualification deficiency, there was no actual loss of safety function, no single train loss of safety function for greater than the technical specification allowed outage time, and no risk due to external events. The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance, resources component, because licensee procedures were not complete or adequate to ensure that the P-32E pump shaft was rigged and installed without damage to the shaft. [H.2(c)]

Inspection Report# : [2008004](#) (*pdf*)

Significance:  Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Equalizing Charge Voltage Not Bounded by Battery Room Hydrogen Generation Calculation

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, Design Control, was identified by the team for the failure to ensure that the design limit established in a design basis calculation, used to determine safety-related batteries hydrogen generation rate, bounded the value used in a maintenance procedure for a safety related component. During the inspection, the licensee evaluated and determined that the effect of the higher hydrogen gas generation did not have an impact on the operability of the batteries and the ventilation system.

The finding was greater than minor because the lack of adequate design control process resulted in increase of hydrogen generation levels and in a reasonable doubt of operability of the 125-Volt direct current system. The finding was determined to be of very low significance, because it was a design deficiency that did not result in actual loss of safety function. This finding does not have a cross-cutting aspect because it is not indicative of current performance.

Inspection Report# : [2008009](#) (*pdf*)

Significance:  Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Conservative Design Basis for Primary Auxiliary Building Heat-up

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, Design Control, was identified by the team for the failure to verify the accuracy of design using alternative or simplified calculational methods or by the performance of a suitable testing program. Specifically, the licensee used non-conservative field test data as a basis for the design temperatures given in the equipment qualification (EQ) manual for components in the auxiliary building, resulting in specified design temperatures for some safety related components that may be as much as approximately 40 degrees Fahrenheit less than calculated worst case accident condition temperatures. The licensee re-evaluated the consequences of the higher temperatures and concluded the equipment remained operable.

The finding was determined to be more than minor because, if the EQ design temperatures were left uncorrected, this deficiency could lead to inadequately qualified replacement parts or inadequately designed plant modifications in the future. The finding was determined to be of very low significance because, by the end of the inspection, the licensee was able to show that all affected components were capable of performing their safety related functions under the higher than previously anticipated temperatures. The team did not identify a cross-cutting aspect associated with this finding.

Inspection Report# : [2008009](#) (*pdf*)

Significance:  Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Ability to Transfer Fuel Oil Between EDG Fuel Oil Tanks T-175A/B Has Not Been Demonstrated by Testing

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XI, Test Control, was identified by the team for the failure to test the components used for transfer of fuel oil between two underground storage tanks that support emergency diesel generator (EDG) operation. Specifically, the licensee has not demonstrated the transfer of fuel between tanks T-175A and T-175B as credited in the Technical Specification (TS) Basis and Updated Safety Analysis Report. The licensee entered this issue into its corrective action and prepared to test these components.

This finding was determined to be more than minor because the failure to verify the transfer capability affected the ability to ensure emergency power availability for greater than two days. This finding was screened as very low safety significance because it was a deficiency that did not result in the loss of safety function. This finding does not have a cross-cutting aspect because it was not indicative of current performance.

Inspection Report# : [2008009](#) (*pdf*)

Significance:  Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

RHR Pump Suction Pressure Gages Repeatedly Found To Be Out Of Tolerance

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XII, Control of Measuring and Test Equipment, was identified by the team for the failure to correct a known trend of out of tolerance (OOT) test pressure gauge which were used in a critical In Service Test (IST) Program performance test of the residual heat removal (RHR) pumps for Units 1 and 2. The licensee entered this issue into its corrective action and confirmed operability of the RHR pumps.

The finding was determined to be more than minor because, if left uncorrected, it could become a more significant safety concern. Specifically, since the cause of the high frequency OOT conditions for these pressure gauges has not been identified, it could be assumed that this instrumentation could be out of tolerance in a non-conservative manner. The finding was determined to be of very low significance because the comprehensive IST performance test conducted during the 2008 refueling outage showed that the actual test results were within the acceptable band,

thereby confirming that operability and functionality of the RHR pumps had not been lost. This finding has a cross-cutting aspect in the area of Human Performance, Resources because the licensee did not ensure adequate resources were available to minimize long-standing equipment issues (H.2(a)).

Inspection Report# : [2008009](#) (*pdf*)

Barrier Integrity

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Conservative Low Temperature Overpressure Protection Setpoints

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” was self revealed upon discovery of the use of a non-conservative setpoint for the Low Temperature Overpressure Protection (LTOP) systems for Units 1 and 2. Specifically, licensee calculation 2000-0001, “RCS [Reactor Coolant System] Pressure and Temperature Limits and Low Temperature Overpressure Protection Setpoints Applicable through 32.2 EFPY[Effective Full Power Years] – Unit 1 and 34.0 EFPY – Unit 2,” established an LTOP setpoint of 500 pounds per square inch – gauge (psig). However, by using the setpoint calculation methodology of 10 CFR Part 50, Appendix G, the resulting LTOP setpoint was calculated to be 420 psig. Therefore, the 500 psig setpoint was found to be non conservative and the LTOP systems were declared inoperable. As part of its corrective actions, the licensee revised the LTOP setpoints from 500 psig to 420 psig and made changes to operating procedures to delineate the acceptable operating conditions of the reactor coolant pumps and charging pumps during low temperature conditions.

The finding was determined to be more than minor because the finding was associated with the human performance attribute of the Barrier Integrity Cornerstone and affected the cornerstone objective of providing reasonable assurance that physical design barriers, such as containment, protect the public from radionuclide releases caused by accidents or events. Specifically, the non-conservative LTOP setpoint provided reasonable doubt that the integrity of the RCS pressure boundary would be maintained during low temperature conditions. The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, “Significance Determination Process,” Attachment 0609.04, “Phase 1 - Initial Screening and Characterization of Findings,” Table 4a for the Barrier Integrity Cornerstone, dated January 10, 2008. The inspectors determined that the finding was of very low safety significance (Green) because all of the questions in the containment barrier column of Table 4a were answered NO and the actual setpoint of the power operated relief valves was 415 psig, below the revised LTOP setpoint. The inspectors also determined that the finding has a cross cutting aspect in the area of problem identification and resolution, corrective action program component, because personnel did not use a low threshold for identifying issues [P.1(a)].

Inspection Report# : [2008005](#) (*pdf*)

Significance:  Sep 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Procedures for Use of the Containment Hatch Doors

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” was self revealed for the failure to follow system operating procedure requirements to visually inspect and remove debris from the Unit 1 lower containment airlock door sealing surface upon exit from the airlock, which resulted in the failure of the airlock to meet its post maintenance testing acceptance criteria on September 9, 2008. As part of its corrective actions, the licensee reinforced with the hatch operators the procedural requirements.

The finding was determined to be more than minor because the finding was associated with the Barrier Integrity

Cornerstone attribute of human performance and affected the cornerstone objective of providing reasonable assurance that physical design barriers, such as containment, protect the public from radionuclide releases caused by accidents or events. The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a for the Barrier Integrity Cornerstone. The inspectors determined that the finding was of very low safety significance because all of the questions in the containment barrier column of Table 4a were answered NO. The inspectors also determined that this finding has a cross-cutting aspect in the area of human performance, work practices component, because personnel did not follow procedures. [H.4(b)]

Inspection Report# : [2008004](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Establish Written Procedures to Implement the Effluent Control Program

The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation of Technical Specification 5.4.1 for the failure to establish written procedures to implement the radioactive effluent control program as provided in the Offsite Dose Calculation Manual to ensure effluent sample analyses satisfied required detection criteria. Specifically, no process was established to ensure that effluent analysis capabilities for chemistry analytical equipment were periodically demonstrated to meet required lower levels of detection (LLDs). As corrective actions, the licensee subsequently performed LLD determinations for its analytical equipment (gamma spectroscopy system) and developed procedures to ensure LLDs were periodically verified consistent with industry standards.

The finding was determined to be more than minor because it affected the program and process attribute of the Public Radiation Safety Cornerstone and affected the cornerstone objective of ensuring adequate protection of public health and safety from exposure to radioactive material released into the public domain. Specifically, given the instability in the licensee's gamma spectroscopy system since 2007, as evidenced by repetitive performance check failures, the ability of the equipment to achieve required LLDs could have been impacted or necessitated changes in analysis parameters (such as count times) resulting in non-conservative effluent quantification. The inspectors determined that the finding was of very low safety significance (Green) because it did not represent a substantial failure to implement the effluent release program or result in public dose that exceeded specified criterion. The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance, resources component, in that the licensee failed to develop procedures to fully implement its effluent program as provided in the Offsite Dose Calculation Manual (ODCM) [H.2(c)].

Inspection Report# : [2008005](#) (*pdf*)

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: N/A Mar 27, 2009

Identified By: NRC

Item Type: FIN Finding

Biennial Problem Identification and Resolution Report Summary

Based on the samples selected for review, the inspectors concluded that implementation of the corrective action program (CAP) was adequate. The inspectors noted that the licensee has a sufficiently low threshold for identifying issues and entering them in the CAP and established additional directions to ensure a lower threshold was consistently used. Prioritization of items entered in the CAP was adequate with recent improvements that have reduced the action item backlog and allowed the station to focus on higher priority items. The inspectors noted that the licensee entered operating experience into the CAP but did not always fully evaluate the information for applicability to station components. Audits and self assessments were determined to be performed at an appropriate level to identify deficiencies. On the basis of licensee self-assessments and interviews conducted during the inspection, workers at the site expressed freedom to raise safety concerns

Inspection Report# : [2009006](#) (*pdf*)

Significance: SL-IV Jul 25, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a 10 CFR 50.59 Evaluation for Changes to SI System Valve Back-Seating Procedures

The inspectors identified a Severity Level IV Non-Cited Violation, having very low safety significance, of 10 CFR 50.59, Changes, Tests, and Experiments, for the licensee's failure to provide documented basis for determining that changes to procedures did not require prior NRC approval. Specifically, the licensee incorrectly concluded that a 10 CFR 50.59 screening was not required when procedures were revised to eliminate the practice of back-seating normally open gate/globe valves even though the Final Safety Analysis Report stated that normally open gate/globe valves in the Safety Injection (SI) system are back-seated to limit valve stem leakage.

The finding was determined to be more than minor because the team could not reasonably determine that the change to the plant procedure which had removed a barrier to release radioactivity into the auxiliary building would not have ultimately required NRC prior approval. The finding was determined to be of very low safety significance because it only represented a degradation of the radiological barrier function provided for the auxiliary building. This finding has a cross-cutting aspect in the area of Human Performance, Decision Making, because during performance of the 10 CFR 50.59 applicability determination for a procedural change, in March 2008, the licensee made an inappropriate decision by failing to require a screen or full 50.59 evaluation (H.1.(a)).

Inspection Report# : [2008009](#) (*pdf*)

Significance: N/A Dec 31, 2006

Identified By: NRC

Item Type: AV Apparent Violation

NRC to Review Items in Confirmatory Order Dated January 3, 2007, for Employment Discrimination Settlement.

In a letter dated January 3, 2007 (ADAMS Accession Number ML063630336), the NRC issued a Confirmatory Order to the licensee as part of a settlement agreement through the NRC's Alternative Dispute Resolution (ADR) process. The NRC investigated an alleged violation of 10 CFR 50.7, "Employee Protection," to determine whether a senior reactor operator was the subject of retaliation for raising a nuclear safety concern in the licensee's corrective action program. This issue was resolved through the NRC's ADR program and will be tracked as Apparent Violation (AV) 05000266/2006013-05; 05000301/2006013-05 pending NRC review of the licensee's completion of items specified in the Confirmatory Order.

NOTE: All of the specific items from this AV are also tracked as ORDER items in RPS/IR.

Inspection Report# : [2006013](#) (*pdf*)

Inspection Report# : [2008003](#) (*pdf*)

Last modified : August 31, 2009

Point Beach 2

3Q/2009 Plant Inspection Findings

Initiating Events

Significance: G Mar 27, 2009

Identified By: NRC

Item Type: FIN Finding

Failure To Adequately Control High Winds/Tornado Hazards

A finding of very low safety significance was identified by the inspectors for the licensee's failure to maintain control over the proper storage and placement of materials, within the risk significant areas of the outdoors protected area, that were classified as high winds/tornado hazards in accordance with station procedures PC 99, "Tornado Hazards Inspection Checklist," and NP 1.9.6, "Plant Cleanliness and Storage." Specifically, these unsecured items were identified near the Unit 1 and Unit 2 main transformer lines, auxiliary transformers, and the G 03/G 04 emergency diesel generator building. Once notified, the licensee removed or secured the materials appropriately and entered the issue into its corrective action program. At the end of the inspection period, the licensee continued to perform a root cause evaluation and develop long-term corrective actions.

The finding was determined to be more than minor because if left uncorrected, the loose items would become a more significant safety concern. The inspectors evaluated the finding using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," dated January 10, 2008. The finding is of very low safety significance (Green) because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance, work practices component, because the licensee failed to ensure adequate supervisory and management oversight of the implementation and follow through of the corrective actions from previous related issues (H.4(c)).

Inspection Report# : [2009006](#) (*pdf*)

Significance: G Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Inspection Procedure for Containment Polar Crane Structures

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self revealed for the failure to have inspection procedures appropriate to the circumstances for the Unit 1 and Unit 2 containment polar cranes and their integral support structures. Specifically, station routine maintenance procedure 1(2) RMP 9118 1(2), "Containment Building Crane OSHA Operability Inspections," did not require that the polar crane lateral restraint bolts be inspected to ensure that they do not show signs of degradation or movement, e.g., flaking paint or being backed out of position. As a result, improperly installed bolts went undiscovered by the licensee until a failed bolt was found on October 16, 2008, lying on the containment floor. The discovery prompted further inspection of the entire crane support structure and led to the de rating of the polar crane's lifting capacity from 100 tons to 40 tons. In addition to conducting an extent-of-condition inspection, the licensee entered the issue into its corrective action program (CAP), replaced all degraded bolts, and performed an apparent cause evaluation.

The finding was determined to be more than minor because the finding was associated with the Initiating Events Cornerstone attribute of equipment performance and affected the cornerstone objective of limiting the likelihood of those events that challenge critical safety functions during shutdown. Specifically, failing to visually inspect critical bolting locations on crane supports could have allowed the use of the polar crane for heavy load lifts while in a degraded condition, increasing the likelihood of a load drop. The inspectors determined that the finding could be evaluated in accordance with Inspection Manual Chapter 0609, Appendix G, "Shutdown Operations SDP [Significance Determination Process]," dated February 28, 2005. The issue did not need a quantitative assessment and

screened as Green using Figure 1. This finding has a cross-cutting aspect in the area of human performance, resources, for the failure to have complete and accurate procedures in place. Specifically, the vague and insufficient detail in the crane inspection procedures contributed to the licensee's failure to perform an adequate inspection to identify degraded components prior to their failure [H.2(c)].

Inspection Report# : [2008005](#) (pdf)

Mitigating Systems

Significance:  Jun 30, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Seismic Assessment Of Temporary Cable Installations Above Motor-Driven Auxiliary Feedwater Pumps

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure of the licensee's modification process to ensure that new 4160-volt cables installed for proposed auxiliary feedwater (AFW) pump motor replacements were installed in accordance with applicable regulatory requirements. Specifically, no seismic design evaluation was completed prior to the installation of the cable coils suspended above the existing motor-driven AFW pumps for over 6 months. In response to the issue, the licensee installed a new restraint designed to meet seismic criteria and completed calculations that showed the as-left condition of the modification did not challenge operability.

This performance deficiency was more than minor because it was associated with the Mitigating System Cornerstone attribute of design control and adversely affected the cornerstone objectives of ensuring the availability, reliability, and capability of systems to respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, once identified, the modification required rework to comply with applicable design requirements. The inspectors determined the finding was of very low safety significance (Green) because the issue did not result in the actual loss of a safety function. The inspectors also determined the finding has a cross cutting aspect in the area of human performance, work control, because the licensee failed to incorporate risk insights and planned contingencies into work plans (H.3(a)).

Inspection Report# : [2009003](#) (pdf)

Significance:  Jun 30, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Inadequate Work Instructions And Procedures For 2P-11B Component Cooling Water Pump Maintenance

A finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self revealed for the failure to have adequate work instructions and procedures in place for the March 2009 repair of the 2P 11B component cooling water (CCW) pump. Specifically, the work instructions did not contain sufficient guidance to ensure the proper installation, alignment, and adequacy of material conditions for reuse, of critical pump components. As a result, the CCW pump was returned to service, while still in a degraded state, and required an additional entry into a technical specification action condition 2 weeks later for unplanned corrective maintenance to replace components and repair an oil leak. In response to the issues, the licensee overhauled the pump and performed an apparent cause evaluation, which identified additional long term corrective actions.

The finding was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the CCW pump was degraded with an oil leak from the inboard bearing motor side oil seal and may not have been able to fulfill the 30-day mission time of the pump. The inspectors determined that the finding was of very low safety significance (Green) because the finding did not involve a design or qualification

deficiency, did not represent an actual loss of safety function, or represent a single train loss of safety function for greater than the Technical Specification-allowed outage time, and was not potentially risk-significant for external events. The inspectors also determined that this finding has a cross-cutting aspect in the area of human performance, resources, because the level of training provided to the station personnel limited their ability to identify technical procedural deficiencies encountered during pump maintenance (H.2(b)).

Inspection Report# : [2009003](#) (pdf)

Significance:  Jun 30, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Conservative Technical Specification Limit Value For The 48-Hour Diesel Fuel Oil Storage Volume

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," involving the diesel fuel oil storage volume for the emergency diesel generators (EDGs). Specifically, the licensee failed to account for the fuel consumption of a second EDG when establishing the value for the Technical Specification limit for the 48-hour diesel fuel oil storage volume. In response to the issue, the licensee implemented compensatory actions to maintain an adequate fuel volume.

This performance deficiency was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring availability of the EDG to respond to initiating events to prevent undesirable consequences. This finding was of very low safety significance (Green) because the inspectors determined that the finding was a design deficiency confirmed not to result in loss of operability or functionality and the finding screened as Green using the Significance Determination Process Phase 1 screening worksheet. The inspectors did not identify a cross cutting aspect associated with this finding because the performance deficiency occurred many years ago.

Inspection Report# : [2009003](#) (pdf)

Significance:  Jun 30, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Work Instructions For South Service Water Header Work

. The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criteria V, "Instructions, Procedures and Drawings," for the failure to have work instructions and procedures commensurate with the risk associated with maintenance on the south service water (SW) system header. Specifically, the licensee did not have work instructions and procedures that assigned appropriate operator actions and contained contingency plans to rapidly restore the header to service if directed by the shift manager. The licensee entered this issue into the corrective action system and made procedure changes for work affecting the operability of a SW header.

This finding was determined to be more than minor because the finding was associated with the Mitigating System Cornerstone attribute of procedure quality and adversely affected the cornerstone objectives of ensuring the availability, reliability, and capability of systems to respond to initiating events to prevent undesirable consequences. Specifically, the work instructions for the maintenance activity did not incorporate the risk associated with the loss of all SW, since this system is the only safety-related system that provides cooling water to plant systems required to respond to initiating events. The inspectors determined the finding to be of very low safety significance (Green) because the issue did not result in the actual loss of a safety function. The inspectors also determined the finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to incorporate risk insights and planned contingencies into work plans (H.3(a)).

Inspection Report# : [2009003](#) (pdf)

Significance:  Mar 31, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Design Of Diesel Fuel Oil Tank Vent For Tornado Protection

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure to fully incorporate applicable tornado missile protection design requirements into the design of the 'A' train diesel fuel oil storage and transfer system. Specifically, the T-175A underground fuel oil storage tank vent line was found not capable of withstanding the effects of a design basis tornado missile strike without resulting in the subsequent loss of capability of the G 01 and G 02 emergency diesel generators to perform their safety functions. The licensee performed a prompt operability determination, concluded that the system was operable but non conforming, and put in place compensatory measures until the design deficiency had been resolved.

The finding was determined to be more than minor in accordance with Inspection Manual Chapter 0612, Appendix B, "Issue Screening," dated December 4, 2008, because the finding was associated with the Mitigating Systems Cornerstone attribute of Design Control and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, closure of the T 175A vent path would adversely affect the availability, reliability, and capability of the G 01 and G 02 emergency diesel generators to perform their safety-related functions. The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a for the Mitigating Systems Cornerstone, dated January 10, 2008. The finding was determined to be of very low safety significance (Green) because the finding was a design deficiency confirmed not to result in loss of operability. The inspectors did not identify a cross-cutting aspect associated with this finding as the performance deficiency occurred in the 1990s and was not indicative of current performance.

Inspection Report# : [2009002](#) (pdf)

Significance:  Mar 27, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Adequately Input Mechanism Operated Control Switch Failure Evaluations and Recommendations Into Maintenance Procedures

A finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the failure to have appropriate maintenance procedures for Mechanism Operated Cell (MOC) switches. Specifically, the licensee failed to have steps in the MOC switch preventative maintenance procedures for specific inspection and verification actions at the frequency, and with actions, recommended by causal evaluations and the vendor. The licensee entered this issue into the corrective action program and was evaluating corrective actions.

The finding was determined to be more than minor because if left uncorrected the issue would lead to a more significant safety concern. Specifically, the failure to identify degraded hardware on a MOC switch could lead to the failure of associated safety related equipment and alarms. The issue was of very low safety significance based on a Phase 1 screening in accordance with Inspection Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," dated January 10, 2008. This finding has a cross-cutting aspect in the area of problem identification, corrective action program component, because the licensee failed to thoroughly evaluate problems such that the resolutions addressed causes and extent of condition as necessary (P.1(c)).

Inspection Report# : [2009006](#) (pdf)

Significance:  Mar 27, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Inverter Maintenance Procedures Did Not Include Steps For Capacitor Replacement

. A finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to have appropriate maintenance procedures and work instructions in place for certain safety-related inverters. Specifically, the licensee failed to have steps in the routine maintenance procedure (RMP) 9036 series maintenance

procedures for periodic replacement of the electrolytic capacitors in the SCI-model inverters as recommended by the vendor. The licensee entered this issue into the corrective action program, scheduled replacement of the capacitors, and was further evaluating the vendor recommendation.

The finding was more than minor because, if left uncorrected, the finding would become a more safety significant concern. Not replacing the electrolytic capacitors in the SCI inverters based on the vendor recommended life could result in the failure of the inverter to perform their safety function and respond to initiating events. The issue was of very low safety significance based on a Phase 1 screening in accordance with Inspection Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," dated January 10, 2008. This finding had a cross-cutting aspect in the area of problem identification and resolution, corrective action program component, because the licensee failed to implement and institutionalize operating experience, including vendor recommendations, through changes to station procedures (P.2(b)).

Inspection Report# : [2009006](#) (*pdf*)

Significance: SL-III Mar 09, 2009

Identified By: NRC

Item Type: VIO Violation

Failure to Notify NRC of Licensed Operator Medical Restrictions in accordance with 10 CFR 50.9 and 55.23.

During a U.S. Nuclear Regulatory Commission (NRC) inspection conducted on November 25, 2008 through March 9, 2009, violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violations are listed below:

1. Title 10 CFR 50.74(c) requires that each licensee notify the appropriate NRC Regional Administrator within 30 days of a permanent disability or illness, as described in 10 CFR 55.25, of a licensed operator or a senior operator. Contrary to the above, from May 1999 until October 20, 2008, a period greater than 30 days, the licensee failed to notify the NRC Region III Regional Administrator of a permanent disability or illness of a licensed operator. Specifically, the licensee was informed in February 1993 that the non-licensed operator was taking prescribed medication for hypertension, a permanent disability or illness. The non-licensed operator applied for an NRC operating license in May 1999. The NRC issued the operator a reactor operator license August 27, 1999, and a senior reactor operator license on February 22, 2002, with no restrictions. The licensee did not inform the NRC of the operator's medical condition until October 20, 2008.

2. Title 10 CFR 50.9 requires, in part, that information provided to the Commission by an applicant for a license or by a licensee or information required by statute or by the Commission's regulations, Orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects. Title 10 CFR 55.23 requires, in part, that to certify the medical fitness of the applicant, an authorized representative of the facility licensee shall complete and sign NRC Form 396, "Certification of Medical Examination by Facility Licensee." The NRC Form 396, when signed by an authorized representative of the facility licensee, certifies that a physician conducted a medical examination of the applicant and that the guidance contained in American National Standards Institute/American Nuclear Society (ANSI/ANS) Standard 3.4-1996, "Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants" was followed in conducting the examination and making the determination of medical qualification.

The ANSI/ANS 3.4-1996, Section 5.3, provides, in part, that the presence of certain medical conditions, unless adequately compensated by the methods specified in Subsections 5.3.1 through 5.3.9, shall disqualify the individual.

Contrary to the above, on January 28, 2008, the facility licensee provided information to the NRC that was not complete and accurate in all material respects. Specifically, the licensee submitted an NRC Form 396 for renewal of a senior reactor operator's license and the NRC Form 396 certified that the applicant met the medical requirements of ANSI/ANS 3.4 1996 with no restrictions. However, In February 1993, the operator was prescribed medication to adequately compensate for a disqualifying medical condition. The certification by the senior licensee facility representative was material to the NRC because the NRC relied upon this certification to renew the senior reactor operator's license pursuant to 10 CFR Part 55 when the license should have been modified with a restriction that the senior reactor operator was required to take medication as prescribed to maintain his qualification.

This is a Severity Level III problem (Supplement VII).

The associated two AVs 2009-008-01 and 2009-008-02 were combined to form this one SLiii Problem.

Barrier Integrity

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Conservative Low Temperature Overpressure Protection Setpoints

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” was self revealed upon discovery of the use of a non-conservative setpoint for the Low Temperature Overpressure Protection (LTOP) systems for Units 1 and 2. Specifically, licensee calculation 2000-0001, “RCS [Reactor Coolant System] Pressure and Temperature Limits and Low Temperature Overpressure Protection Setpoints Applicable through 32.2 EFPY[Effective Full Power Years] – Unit 1 and 34.0 EFPY – Unit 2,” established an LTOP setpoint of 500 pounds per square inch – gauge (psig). However, by using the setpoint calculation methodology of 10 CFR Part 50, Appendix G, the resulting LTOP setpoint was calculated to be 420 psig. Therefore, the 500 psig setpoint was found to be non conservative and the LTOP systems were declared inoperable. As part of its corrective actions, the licensee revised the LTOP setpoints from 500 psig to 420 psig and made changes to operating procedures to delineate the acceptable operating conditions of the reactor coolant pumps and charging pumps during low temperature conditions.

The finding was determined to be more than minor because the finding was associated with the human performance attribute of the Barrier Integrity Cornerstone and affected the cornerstone objective of providing reasonable assurance that physical design barriers, such as containment, protect the public from radionuclide releases caused by accidents or events. Specifically, the non-conservative LTOP setpoint provided reasonable doubt that the integrity of the RCS pressure boundary would be maintained during low temperature conditions. The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, “Significance Determination Process,” Attachment 0609.04, “Phase 1 - Initial Screening and Characterization of Findings,” Table 4a for the Barrier Integrity Cornerstone, dated January 10, 2008. The inspectors determined that the finding was of very low safety significance (Green) because all of the questions in the containment barrier column of Table 4a were answered NO and the actual setpoint of the power operated relief valves was 415 psig, below the revised LTOP setpoint. The inspectors also determined that the finding has a cross cutting aspect in the area of problem identification and resolution, corrective action program component, because personnel did not use a low threshold for identifying issues [P.1(a)].

Inspection Report# : [2008005 \(pdf\)](#)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Establish Written Procedures to Implement the Effluent Control Program

The inspectors identified a finding of very low safety significance and an associated Non-Cited Violation of Technical Specification 5.4.1 for the failure to establish written procedures to implement the radioactive effluent control program as provided in the Offsite Dose Calculation Manual to ensure effluent sample analyses satisfied required detection criteria. Specifically, no process was established to ensure that effluent analysis capabilities for chemistry analytical equipment were periodically demonstrated to meet required lower levels of detection (LLDs). As corrective actions, the licensee subsequently performed LLD determinations for its analytical equipment (gamma spectroscopy system) and developed procedures to ensure LLDs were periodically verified consistent with industry standards.

The finding was determined to be more than minor because it affected the program and process attribute of the Public Radiation Safety Cornerstone and affected the cornerstone objective of ensuring adequate protection of public health and safety from exposure to radioactive material released into the public domain. Specifically, given the instability in the licensee's gamma spectroscopy system since 2007, as evidenced by repetitive performance check failures, the ability of the equipment to achieve required LLDs could have been impacted or necessitated changes in analysis parameters (such as count times) resulting in non-conservative effluent quantification. The inspectors determined that the finding was of very low safety significance (Green) because it did not represent a substantial failure to implement the effluent release program or result in public dose that exceeded specified criterion. The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance, resources component, in that the licensee failed to develop procedures to fully implement its effluent program as provided in the Offsite Dose Calculation Manual (ODCM) [H.2(c)].

Inspection Report# : [2008005](#) (*pdf*)

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: N/A Mar 27, 2009

Identified By: NRC

Item Type: FIN Finding

Biennial Problem Identification and Resolution Report Summary

Based on the samples selected for review, the inspectors concluded that implementation of the corrective action program (CAP) was adequate. The inspectors noted that the licensee has a sufficiently low threshold for identifying issues and entering them in the CAP and established additional directions to ensure a lower threshold was consistently used. Prioritization of items entered in the CAP was adequate with recent improvements that have reduced the action item backlog and allowed the station to focus on higher priority items. The inspectors noted that the licensee entered operating experience into the CAP but did not always fully evaluate the information for applicability to station components. Audits and self assessments were determined to be performed at an appropriate level to identify deficiencies. On the basis of licensee self-assessments and interviews conducted during the inspection, workers at the site expressed freedom to raise safety concerns

Inspection Report# : [2009006](#) (*pdf*)

Significance: N/A Dec 31, 2006

Identified By: NRC

Item Type: AV Apparent Violation

NRC to Review Items in Confirmatory Order Dated January 3, 2007, for Employment Discrimination Settlement.

In a letter dated January 3, 2007 (ADAMS Accession Number ML063630336), the NRC issued a Confirmatory Order

to the licensee as part of a settlement agreement through the NRC's Alternative Dispute Resolution (ADR) process. The NRC investigated an alleged violation of 10 CFR 50.7, "Employee Protection," to determine whether a senior reactor operator was the subject of retaliation for raising a nuclear safety concern in the licensee's corrective action program. This issue was resolved through the NRC's ADR program and will be tracked as Apparent Violation (AV) 05000266/2006013-05; 05000301/2006013-05 pending NRC review of the licensee's completion of items specified in the Confirmatory Order.

NOTE: All of the specific items from this AV are also tracked as ORDER items in RPS/IR.

Inspection Report# : [2006013](#) (*pdf*)

Inspection Report# : [2008003](#) (*pdf*)

Last modified : December 10, 2009

Point Beach 2

4Q/2009 Plant Inspection Findings

Initiating Events

Significance:  Mar 27, 2009

Identified By: NRC

Item Type: FIN Finding

Failure To Adequately Control High Winds/Tornado Hazards

A finding of very low safety significance was identified by the inspectors for the licensee's failure to maintain control over the proper storage and placement of materials, within the risk significant areas of the outdoors protected area, that were classified as high winds/tornado hazards in accordance with station procedures PC 99, "Tornado Hazards Inspection Checklist," and NP 1.9.6, "Plant Cleanliness and Storage." Specifically, these unsecured items were identified near the Unit 1 and Unit 2 main transformer lines, auxiliary transformers, and the G 03/G 04 emergency diesel generator building. Once notified, the licensee removed or secured the materials appropriately and entered the issue into its corrective action program. At the end of the inspection period, the licensee continued to perform a root cause evaluation and develop long-term corrective actions.

The finding was determined to be more than minor because if left uncorrected, the loose items would become a more significant safety concern. The inspectors evaluated the finding using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," dated January 10, 2008. The finding is of very low safety significance (Green) because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance, work practices component, because the licensee failed to ensure adequate supervisory and management oversight of the implementation and follow through of the corrective actions from previous related issues (H.4(c)).

Inspection Report# : [2009006](#) (*pdf*)

Mitigating Systems

Significance:  Dec 31, 2009

Identified By: NRC

Item Type: FIN Finding

Failure To Meet Generic Letter 89-13 Program Requirement For Mussel Control

The inspectors identified a finding of very low safety significance for the failure to meet a commitment made in the Generic Letter 89-13 program. Specifically, the program states that biocide treatments at Point Beach are performed at least annually and are directly applied to the service water system for mussel control and eradication to prevent fouling of safety related heat exchangers. However, the 2008 biocide treatment for mussel control was deferred until 2009. After the treatment in 2009, greater than expected tube blockage and reduced flow to safety-related heat exchangers due to mussels was identified. In response, the licensee adjusted flow through the affected heat exchangers and opened and cleaned the heat exchangers to remove mussels that caused the tube blockage. The licensee took corrective actions to ensure that future annual biocide treatments would be conducted annually.

This finding was more than minor because it was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and adversely affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04,

"Phase 1 – Initial Screening and Characterization of Findings," Table 4a, for the Mitigating Systems Cornerstone, dated January 10, 2008. The finding was determined to be of very low safety significance because the issue did not result in the actual loss of a safety function. This finding did not involve a violation of NRC regulatory requirements. The inspectors determined this performance deficiency was not indicative of current performance; therefore, no cross-cutting aspect was identified.

Inspection Report# : [2009005](#) (pdf)

Significance:  Dec 31, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Update Safe Load Path Manual To Include Safety-Related Cable Locations

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, Design Control, for the failure to update the Safe Load Path Manual for the Unit 2 turbine building (SLP 3) as part of the mid-1990's modification that added the G 03 and G 04 emergency diesel generators. Specifically, it was identified that SLP-3 allowed unrestricted load lifts over the Unit 2 turbine building truck bay area, based upon a 1980's evaluation, and was not updated to reflect a modification that added safety-related cables for emergency diesel generators under the Unit 2 truck bay. Due to the close proximity of the "A" train cables to the "B" train cables, a loss of both trains of emergency alternating current (AC) power could result if the underground cables were disabled by a dropped load of sufficient magnitude. The licensee addressed the immediate concern by installing temporary steel plates over the affected area of the truck bay to provide adequate protection for upcoming heavy load lifts. Additionally, the licensee revised SLP 3 to require additional risk mitigation measures be taken prior to heavy load lifts in that area.

The finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of design control and adversely affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," Table 4a, for the Mitigating Systems Cornerstone, dated January 10, 2008. The finding was determined to be of very low safety significance because the issue did not result in the actual loss of a safety function. This finding had a cross-cutting aspect in the area of problem identification and resolution, corrective action program component, because the staff did not take appropriate corrective actions to address safety issues in a timely manner, commensurate with their safety significance. Specifically, in 2008, when questions were raised by licensee staff regarding the adequacy of SLP-3, the SLP was not revised (P.1(d)).

Inspection Report# : [2009005](#) (pdf)

Significance:  Dec 31, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Momentary Loss Of Unit 2 Reactor Vessel Level Indication In The Control Room

A self-revealed finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for performing an Instrumentation and Control procedure that was inappropriate to the circumstances, and resulted in the momentary loss of all available channels of reactor vessel level indication in the control room. As part of the immediate corrective actions, the licensee suspended the performance of the procedure and sent an operator into containment to verify reactor vessel level via the local standpipe level indicator and to ensure level indication was reestablished. Additionally, the licensee applied a work planning logic-tie to this activity to ensure the reactor was de-fueled prior to performing this calibration and was currently evaluating the need for revisions to the procedure.

The finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of procedure quality and adversely affected the associated cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors assessed the significance of the finding in accordance with Inspection Manual Chapter 0609, Appendix G,

"Shutdown Operations Significance Determination Process," and determined that this issue required a Phase 2 analysis since the finding increased the likelihood of a loss of reactor coolant system inventory. The inspectors and a senior reactor analyst determined through the analysis that this issue is best characterized as a finding of very low safety significance. This finding had a cross-cutting aspect in the area of human performance, work control component, in that the licensee did not appropriately coordinate work activities for the existing plant conditions to ensure the operational impact on reactor vessel level indication while at a water level above reduced inventory was fully understood (H.3(b)).

Inspection Report# : [2009005](#) (pdf)

Significance:  Dec 18, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Errors Found in the Room Ventilation Calculation for G-01 and G-02

A finding of very low safety-significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control" was identified by the inspectors for the licensee's failure to adequately calculate the maximum room temperature for G-01 and G-02. Specifically, the licensee's calculation 2005-0054 failed to incorporate the design basis described in Technical Specification (TS) bases 3.8.1 related to the numbers of fire dampers associated with G-01 and G-02 exhaust fans that must be opened to maintain room temperature. The calculation also failed to demonstrate that the temperature stratification close to the combustion air intake filter was acceptable. Instead, the calculation only considered the bulk air temperature in the room. The licensee subsequently entered these concerns into their corrective action program as AR 01162599 and AR 01162759.

The finding was determined to be more than minor because the finding was similar to IMC 0612, Appendix E, Example (3.J). The calculation errors were significant in that there was reasonable doubt that the maximum room temperature would not exceed the value of the Vendor Technical manual. The finding impacted the Mitigating System cornerstone of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee did not ensure that the maximum room temperature of EDG-1 and EDG-2 would not exceed 115 degrees Fahrenheit (F), which is required to be maintained to ensure that the EDGs will perform their safety function during a design basis accident when the outside air temperature was 95 degrees Fahrenheit. The finding was of very low safety-significance based on a Phase 1 screening in accordance with IMC 0609, Appendix A, A Significance Determination of Reactor Inspection Findings for At-Power Situations." This finding was not associated with a cross-cutting aspect because the finding was not indicative of the licensee's current performance.

Inspection Report# : [2009007](#) (pdf)

Significance:  Jun 30, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Seismic Assessment Of Temporary Cable Installations Above Motor-Driven Auxiliary Feedwater Pumps

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure of the licensee's modification process to ensure that new 4160-volt cables installed for proposed auxiliary feedwater (AFW) pump motor replacements were installed in accordance with applicable regulatory requirements. Specifically, no seismic design evaluation was completed prior to the installation of the cable coils suspended above the existing motor-driven AFW pumps for over 6 months. In response to the issue, the licensee installed a new restraint designed to meet seismic criteria and completed calculations that showed the as-left condition of the modification did not challenge operability.

This performance deficiency was more than minor because it was associated with the Mitigating System Cornerstone attribute of design control and adversely affected the cornerstone objectives of ensuring the availability, reliability, and capability of systems to respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, once identified, the modification required rework to comply with applicable design requirements. The inspectors determined the finding was of very low safety significance (Green) because the issue did not result in the

actual loss of a safety function. The inspectors also determined the finding has a cross cutting aspect in the area of human performance, work control, because the licensee failed to incorporate risk insights and planned contingencies into work plans (H.3(a)).

Inspection Report# : [2009003](#) (pdf)

Significance:  Jun 30, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Inadequate Work Instructions And Procedures For 2P-11B Component Cooling Water Pump Maintenance

A finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self revealed for the failure to have adequate work instructions and procedures in place for the March 2009 repair of the 2P 11B component cooling water (CCW) pump. Specifically, the work instructions did not contain sufficient guidance to ensure the proper installation, alignment, and adequacy of material conditions for reuse, of critical pump components. As a result, the CCW pump was returned to service, while still in a degraded state, and required an additional entry into a technical specification action condition 2 weeks later for unplanned corrective maintenance to replace components and repair an oil leak. In response to the issues, the licensee overhauled the pump and performed an apparent cause evaluation, which identified additional long term corrective actions.

The finding was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the CCW pump was degraded with an oil leak from the inboard bearing motor side oil seal and may not have been able to fulfill the 30-day mission time of the pump. The inspectors determined that the finding was of very low safety significance (Green) because the finding did not involve a design or qualification deficiency, did not represent an actual loss of safety function, or represent a single train loss of safety function for greater than the Technical Specification-allowed outage time, and was not potentially risk-significant for external events. The inspectors also determined that this finding has a cross-cutting aspect in the area of human performance, resources, because the level of training provided to the station personnel limited their ability to identify technical procedural deficiencies encountered during pump maintenance (H.2(b)).

Inspection Report# : [2009003](#) (pdf)

Significance:  Jun 30, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Conservative Technical Specification Limit Value For The 48-Hour Diesel Fuel Oil Storage Volume

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," involving the diesel fuel oil storage volume for the emergency diesel generators (EDGs). Specifically, the licensee failed to account for the fuel consumption of a second EDG when establishing the value for the Technical Specification limit for the 48-hour diesel fuel oil storage volume. In response to the issue, the licensee implemented compensatory actions to maintain an adequate fuel volume.

This performance deficiency was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring availability of the EDG to respond to initiating events to prevent undesirable consequences. This finding was of very low safety significance (Green) because the inspectors determined that the finding was a design deficiency confirmed not to result in loss of operability or functionality and the finding screened as Green using the Significance Determination Process Phase 1 screening worksheet. The inspectors did not identify a cross cutting aspect associated with this finding because the performance deficiency occurred many years ago.

Inspection Report# : [2009003](#) (pdf)

Significance:  Jun 30, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Work Instructions For South Service Water Header Work

. The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criteria V, "Instructions, Procedures and Drawings," for the failure to have work instructions and procedures commensurate with the risk associated with maintenance on the south service water (SW) system header. Specifically, the licensee did not have work instructions and procedures that assigned appropriate operator actions and contained contingency plans to rapidly restore the header to service if directed by the shift manager. The licensee entered this issue into the corrective action system and made procedure changes for work affecting the operability of a SW header.

This finding was determined to be more than minor because the finding was associated with the Mitigating System Cornerstone attribute of procedure quality and adversely affected the cornerstone objectives of ensuring the availability, reliability, and capability of systems to respond to initiating events to prevent undesirable consequences. Specifically, the work instructions for the maintenance activity did not incorporate the risk associated with the loss of all SW, since this system is the only safety-related system that provides cooling water to plant systems required to respond to initiating events. The inspectors determined the finding to be of very low safety significance (Green) because the issue did not result in the actual loss of a safety function. The inspectors also determined the finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to incorporate risk insights and planned contingencies into work plans (H.3(a)).

Inspection Report# : [2009003](#) (pdf)

Significance:  Mar 31, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Design Of Diesel Fuel Oil Tank Vent For Tornado Protection

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure to fully incorporate applicable tornado missile protection design requirements into the design of the 'A' train diesel fuel oil storage and transfer system. Specifically, the T-175A underground fuel oil storage tank vent line was found not capable of withstanding the effects of a design basis tornado missile strike without resulting in the subsequent loss of capability of the G 01 and G 02 emergency diesel generators to perform their safety functions. The licensee performed a prompt operability determination, concluded that the system was operable but non conforming, and put in place compensatory measures until the design deficiency had been resolved.

The finding was determined to be more than minor in accordance with Inspection Manual Chapter 0612, Appendix B, "Issue Screening," dated December 4, 2008, because the finding was associated with the Mitigating Systems Cornerstone attribute of Design Control and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, closure of the T 175A vent path would adversely affect the availability, reliability, and capability of the G 01 and G 02 emergency diesel generators to perform their safety-related functions. The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a for the Mitigating Systems Cornerstone, dated January 10, 2008. The finding was determined to be of very low safety significance (Green) because the finding was a design deficiency confirmed not to result in loss of operability. The inspectors did not identify a cross-cutting aspect associated with this finding as the performance deficiency occurred in the 1990s and was not indicative of current performance.

Inspection Report# : [2009002](#) (pdf)

Significance:  Mar 27, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Adequately Input Mechanism Operated Control Switch Failure Evaluations and Recommendations

Into Maintenance Procedures

A finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the failure to have appropriate maintenance procedures for Mechanism Operated Cell (MOC) switches. Specifically, the licensee failed to have steps in the MOC switch preventative maintenance procedures for specific inspection and verification actions at the frequency, and with actions, recommended by causal evaluations and the vendor. The licensee entered this issue into the corrective action program and was evaluating corrective actions.

The finding was determined to be more than minor because if left uncorrected the issue would lead to a more significant safety concern. Specifically, the failure to identify degraded hardware on a MOC switch could lead to the failure of associated safety related equipment and alarms. The issue was of very low safety significance based on a Phase 1 screening in accordance with Inspection Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," dated January 10, 2008. This finding has a cross-cutting aspect in the area of problem identification, corrective action program component, because the licensee failed to thoroughly evaluate problems such that the resolutions addressed causes and extent of condition as necessary (P.1(c)).

Inspection Report# : [2009006](#) (*pdf*)

Significance: G Mar 27, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Inverter Maintenance Procedures Did Not Include Steps For Capacitor Replacement

. A finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to have appropriate maintenance procedures and work instructions in place for certain safety-related inverters. Specifically, the licensee failed to have steps in the routine maintenance procedure (RMP) 9036 series maintenance procedures for periodic replacement of the electrolytic capacitors in the SCI-model inverters as recommended by the vendor. The licensee entered this issue into the corrective action program, scheduled replacement of the capacitors, and was further evaluating the vendor recommendation.

The finding was more than minor because, if left uncorrected, the finding would become a more safety significant concern. Not replacing the electrolytic capacitors in the SCI inverters based on the vendor recommended life could result in the failure of the inverter to perform their safety function and respond to initiating events. The issue was of very low safety significance based on a Phase 1 screening in accordance with Inspection Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," dated January 10, 2008. This finding had a cross-cutting aspect in the area of problem identification and resolution, corrective action program component, because the licensee failed to implement and institutionalize operating experience, including vendor recommendations, through changes to station procedures (P.2(b)).

Inspection Report# : [2009006](#) (*pdf*)

Significance: SL-III Mar 09, 2009

Identified By: NRC

Item Type: VIO Violation

Failure to Notify NRC of Licensed Operator Medical Restrictions in accordance with 10 CFR 50.9 and 55.23.

During a U.S. Nuclear Regulatory Commission (NRC) inspection conducted on November 25, 2008 through March 9, 2009, violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violations are listed below:

1. Title 10 CFR 50.74(c) requires that each licensee notify the appropriate NRC Regional Administrator within 30 days of a permanent disability or illness, as described in 10 CFR 55.25, of a licensed operator or a senior operator. Contrary to the above, from May 1999 until October 20, 2008, a period greater than 30 days, the licensee failed to notify the NRC Region III Regional Administrator of a permanent disability or illness of a licensed operator. Specifically, the licensee was informed in February 1993 that the non-licensed operator was taking prescribed medication for hypertension, a permanent disability or illness. The non-licensed operator applied for an NRC operating license in May 1999. The NRC issued the operator a reactor operator license August 27, 1999, and a senior reactor operator license on February 22, 2002, with no restrictions. The licensee did not inform the NRC of

the operator's medical condition until October 20, 2008.

2. Title 10 CFR 50.9 requires, in part, that information provided to the Commission by an applicant for a license or by a licensee or information required by statute or by the Commission's regulations, Orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects. Title 10 CFR 55.23 requires, in part, that to certify the medical fitness of the applicant, an authorized representative of the facility licensee shall complete and sign NRC Form 396, "Certification of Medical Examination by Facility Licensee." The NRC Form 396, when signed by an authorized representative of the facility licensee, certifies that a physician conducted a medical examination of the applicant and that the guidance contained in American National Standards Institute/American Nuclear Society (ANSI/ANS) Standard 3.4-1996, "Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants" was followed in conducting the examination and making the determination of medical qualification.

The ANSI/ANS 3.4-1996, Section 5.3, provides, in part, that the presence of certain medical conditions, unless adequately compensated by the methods specified in Subsections 5.3.1 through 5.3.9, shall disqualify the individual.

Contrary to the above, on January 28, 2008, the facility licensee provided information to the NRC that was not complete and accurate in all material respects. Specifically, the licensee submitted an NRC Form 396 for renewal of a senior reactor operator's license and the NRC Form 396 certified that the applicant met the medical requirements of ANSI/ANS 3.4 1996 with no restrictions. However, In February 1993, the operator was prescribed medication to adequately compensate for a disqualifying medical condition. The certification by the senior licensee facility representative was material to the NRC because the NRC relied upon this certification to renew the senior reactor operator's license pursuant to 10 CFR Part 55 when the license should have been modified with a restriction that the senior reactor operator was required to take medication as prescribed to maintain his qualification.

This is a Severity Level III problem (Supplement VII).

The associated two AVs 2009-008-01 and 2009-008-02 were combined to form this one SLiii Problem.

Inspection Report# : [2009004](#) (pdf)

Inspection Report# : [2009009](#) (pdf)

Barrier Integrity

Significance:  Dec 31, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure To Ensure Adequate Control Of Foreign Material In Safety-Related Systems

A self-revealed finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for the failure to ensure adequate control of foreign material in accordance with the requirements of procedure NP 8.4.10, "Exclusion of Foreign Material from Plant Components and Systems." Specifically, on October 17, 2009, foreign material was discovered inside the 2SI-897B valve after the valve failed to properly stroke during the performance of procedure IT 215, "SI [safety injection] Valves - Cold Shutdown." The licensee took prompt corrective actions to repair the valve and perform an extent-of-condition review. Additionally, upon entering the issue into its corrective action program, the licensee performed a causal evaluation to determine any additional corrective actions.

The finding was more than minor because it was associated with the Barrier Integrity Cornerstone attribute of human performance and adversely affected the associated cornerstone objective of providing reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, due to the interference caused by the foreign material inside the 2SI 897B valve, the valve would not have been able to perform its safety function to close during the initiation of the post LOCA (loss of coolant accident) sump-recirculation phase of safety injection. The inspectors determined the finding could be evaluated in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a, dated January 10, 2008. The finding was determined to be of very low safety significance because the issue did not represent a degradation of the radiological barrier function

provided for the control room, the auxiliary building, or the spent fuel pool; represent a degradation of the barrier function of the control room against smoke or a toxic atmosphere; represent an actual open pathway in the physical integrity of reactor containment (valves, airlocks, containment isolation system (logic and instrumentation)), and heat removal components; or involve an actual reduction in function of hydrogen ignitors in the reactor containment. No cross cutting aspect was identified because the foreign material was determined to have been introduced into the system in the past and was not considered indicative of current performance.

Inspection Report# : [2009005](#) (pdf)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Significance:  Dec 31, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure To Maintain Proper Control Of Radioactive Material Within The Radiologically Controlled Area

A self-revealed finding of very low safety significance and associated Non-Cited Violation of 10 CFR 20.1101(b) was identified for the failure to adequately control radioactive material to prevent its migration outside the radiologically controlled area (RCA), as required by licensee procedures. On May 21, 2009, a contract worker performing inspections of the main electrical transformers located outside the RCA picked-up a wadded-ball of debris (unmarked tape) and placed it in his front pants pocket. The debris was later found to be radioactively contaminated when the worker alarmed the protected area exit radiation monitors a few hours later as he attempted to leave the site. The tape was likely used to cover contaminated hoses that were previously used within the Point Beach RCA, but had escaped the licensee's control and migrated (blew) into the transformer area outdoors where it was found by the worker. The licensee's storage of radioactive material in an outdoor satellite RCA and/or the licensee's radioactive material control practices during refueling outages when the containment building equipment hatch was open to the environment led to the escape of the material outside the RCA. The contractor's assigned work duties should not have involved exposure to radioactive material; consequently, the worker was unnecessarily exposed to radiation from the contaminated tape. A dose evaluation completed by the licensee's consultant determined that the effective dose equivalent to the worker's thigh from exposure to the contaminated ball of tape was approximately one mrem. The licensee's corrective action called for expanded radiation protection oversight during movement of material in outdoor areas. Procedures were revised to include a post outage walkdown of outdoor areas near the RCA yard. Additionally, the licensee planned to construct an enclosure so that storage/transfer of contaminated materials could be performed indoors.

The finding was more than minor because it impacted the program and process attribute of the Public Radiation Safety Cornerstone and adversely affected the cornerstone objective of ensuring adequate protection of public health and safety from exposure to radiation, in that, unnecessary radiation exposure was received by an individual from inadequately controlled radioactive material. The finding was determined to be of very low safety significance because: (1) it involved a radioactive material control problem that was contrary to NRC requirements and the licensee's procedure; and (2) the dose impact to a member of the public (the contract worker) within the licensee's restricted area was less than 5 millirem total effective dose equivalent. The cause of the radioactive material control problem involved a cross-cutting component in the human performance area for inadequate work control, in that, job site conditions including environmental conditions (high winds, night time work, etc.) impacted human performance and consequently, radiological safety, during movement of material/equipment in outdoor areas (H.3.(a)).

Inspection Report# : [2009005](#) (pdf)

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: N/A Mar 27, 2009

Identified By: NRC

Item Type: FIN Finding

Biennial Problem Identification and Resolution Report Summary

Based on the samples selected for review, the inspectors concluded that implementation of the corrective action program (CAP) was adequate. The inspectors noted that the licensee has a sufficiently low threshold for identifying issues and entering them in the CAP and established additional directions to ensure a lower threshold was consistently used. Prioritization of items entered in the CAP was adequate with recent improvements that have reduced the action item backlog and allowed the station to focus on higher priority items. The inspectors noted that the licensee entered operating experience into the CAP but did not always fully evaluate the information for applicability to station components. Audits and self assessments were determined to be performed at an appropriate level to identify deficiencies. On the basis of licensee self-assessments and interviews conducted during the inspection, workers at the site expressed freedom to raise safety concerns

Inspection Report# : [2009006](#) (*pdf*)

Last modified : March 01, 2010

Point Beach 2

1Q/2010 Plant Inspection Findings

Initiating Events

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Untimely Corrective Actions To Address Longstanding Issue Of Submerged Cables

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified by the inspectors for the licensee's failure to implement timely corrective actions to address the longstanding issue of submerged, medium voltage, underground cables at Point Beach. Specifically, this issue was first identified in 1997, with numerous condition reports written since that time, and in January 2008, it was associated with a significant condition adverse to quality. The licensee entered this issue into its corrective action program. Corrective actions completed include increased monitoring and pumping of manholes; proposed actions include design changes to support automatic monitoring and/or water removal from the manholes.

The finding was more than minor because it was associated with the Initiating Events Cornerstone attribute of protection against external factors and affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenged critical safety functions during shutdown as well as power operations. Specifically, the failure to correct the submerged cable issue in a timely manner; if left uncorrected, would lead to other cable failures as a result of the continued cable degradation. The finding screened as having very low safety significance (Green) because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. The finding had a cross-cutting aspect in the area of human performance, resources, because the licensee did not appropriately maintain long-term plant safety by maintenance of design margins, minimization of longstanding equipment issues, minimizing preventive maintenance deferrals, and ensuring maintenance and engineering backlogs were managed low enough to support safety (H.2(a)).

Inspection Report# : [2010002](#) (*pdf*)

Mitigating Systems

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Inappropriate Application Of A Dedicated Operator During A System Venting Surveillance

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR 50.65(a)(4) was identified by the inspectors for the failure to properly assess risk that resulted from risk-significant maintenance being performed on the residual heat removal, safety injection, and containment spray systems. Specifically, the licensee inappropriately applied criteria for the use of a dedicated operator to meet availability requirements. As part of its corrective actions, the licensee stopped work that required the use of a dedicated operator pending further evaluation.

The issue was more than minor because the licensee's risk assessment for January 12, 2010, failed to consider multiple systems unavailable during maintenance. Specifically, the failure to account for the unavailability of the residual heat removal, safety injection, and containment spray systems, resulted in an inadequate daily risk assessment and could affect the unavailability time of this system in related performance and maintenance rule indicators. The inspectors evaluated the finding using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment K, Maintenance Risk Assessment and Risk Management Significance Determination Process, dated May 19, 2005, and determined the issue screened as having very low safety significance, because the incremental conditional core damage probability was less than 1E-6 due to the test condition lasting only four hours. This finding had a cross-cutting aspect in human performance, decision-making, because the licensee did not have a process or use a systematic approach regarding facets of a dedicated operator (H.1(a)).
Inspection Report# : [2010002](#) (*pdf*)

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Follow Temporary Modification Procedure

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to follow the temporary modifications procedure FP-E-MOD-03, Revision 6. Specifically, the Applicability section of this procedure was not properly applied to the temporary condensate storage tank (CST) modification such that the system was not appropriately characterized as a temporary modification. As a result, the licensee failed to adequately document an evaluation of the potential impacts to operating equipment. As of the conclusion of the inspection, the licensee had entered this issue into its corrective action program.

The finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of design control and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the licensee inappropriately applied the exemption criteria of the temporary modification procedure to the fill point connected to the newly classified "vent" of the permanent CST and failed to assess the impact of the temporary CST system on plant design. The finding screened as having very low safety significance (Green) because the finding was not a design or qualification deficiency resulting in a loss of functionality, did not represent a loss of system safety function or loss of a single train for greater than its allowed technical specification time, and did not screen as potentially risk significant due to seismic, flooding, or severe weather initiating events. This finding had a cross-cutting aspect in the area of human performance, decision-making, because the licensee did not appropriately use conservative assumptions in decision-making and verify the validity of underlying assumptions for the temporary CST modification (H.1(b)).

Inspection Report# : [2010002](#) (*pdf*)

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Establish Required Fire Watches

A finding of very low safety significance and associated Non-Cited Violation of Technical Specification 5.4.1.h for Units 1 and 2 was identified by the inspectors for the licensee's failure to establish appropriate fire watches required as compensatory

3 Enclosure

measures to address identified fire protection impairments. Specifically, on three occasions, the licensee failed to issue, and properly implement, fire watch surveillances as required by procedure OM 3.27. The licensee had entered all instances into its corrective action program.

The finding was more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of protection against external factors (fire) and affected the cornerstone objective of ensuring the availability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to implement fire watches required as compensatory measures degraded the defense-in-depth elements of the fire protection program that is necessary to ensure safe shutdown in the event of a fire. The issue was of very low safety significance based on the low degradation rating for the finding. The finding had a cross-cutting aspect in the area of human performance, resources, because the licensee's preliminary apparent cause evaluation attributed the underlying cause of these events to less than adequate procedures, or procedures that did not adequately link to each other, and pre-job briefing materials that did not address fire protection considerations (H.2(c)).

Inspection Report# : [2010002](#) (*pdf*)

Significance: SL-IV Feb 17, 2010

Identified By: NRC

Item Type: VIO Violation

Inaccurate Information Relating to Signatures on Ignition Control Procedures

A Severity Level IV, Cited Violation of 10 CFR 50.9(a) "Completeness and Accuracy of Information," was identified by the inspectors for the licensee's failure to maintain complete and accurate information required by the Commission. Specifically, a Point Beach Nuclear Plant employee and two contract employees from Day and Zimmermann Nuclear Power Services, signed Ignition Control Permits without the authorized person inspecting the areas as required by the ignition control procedure NP 1.9.13.

The violation affected the NRC's ability to perform its regulatory function because it involved willfulness. Therefore, it was evaluated using Traditional Enforcement. The NRC determined that a Severity Level IV violation was appropriate due to the willful nature of some violation examples. The NRC determined that the violation should be cited because: (1) the violation was NRC-identified; and (2) it was willful; and (3) it involved a first-line supervisor.

Inspection Report# : [2010010](#) (*pdf*)

Significance:  Dec 31, 2009

Identified By: NRC

Item Type: FIN Finding

Failure To Meet Generic Letter 89-13 Program Requirement For Mussel Control

The inspectors identified a finding of very low safety significance for the failure to meet a commitment made in the Generic Letter 89-13 program. Specifically, the program states that biocide treatments at Point Beach are performed at least annually and are directly applied to the service water system for mussel control and eradication to prevent fouling of safety related heat exchangers. However, the 2008 biocide treatment for mussel control was deferred until 2009. After the treatment in 2009, greater than expected tube blockage and reduced flow to safety-related heat exchangers due to mussels was identified. In response, the licensee adjusted flow through the affected heat exchangers and opened and cleaned the heat exchangers to remove mussels that caused the tube blockage. The licensee took corrective actions to ensure that future annual biocide treatments would be conducted annually.

This finding was more than minor because it was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and adversely affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," Table 4a, for the Mitigating Systems Cornerstone,

dated January 10, 2008. The finding was determined to be of very low safety significance because the issue did not result in the actual loss of a safety function. This finding did not involve a violation of NRC regulatory requirements. The inspectors determined this performance deficiency was not indicative of current performance; therefore, no cross-cutting aspect was identified.

Inspection Report# : [2009005](#) (pdf)

Significance:  Dec 31, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Update Safe Load Path Manual To Include Safety-Related Cable Locations

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, Design Control, for the failure to update the Safe Load Path Manual for the Unit 2 turbine building (SLP 3) as part of the mid-1990's modification that added the G 03 and G 04 emergency diesel generators. Specifically, it was identified that SLP-3 allowed unrestricted load lifts over the Unit 2 turbine building truck bay area, based upon a 1980's evaluation, and was not updated to reflect a modification that added safety-related cables for emergency diesel generators under the Unit 2 truck bay. Due to the close proximity of the "A" train cables to the "B" train cables, a loss of both trains of emergency alternating current (AC) power could result if the underground cables were disabled by a dropped load of sufficient magnitude. The licensee addressed the immediate concern by installing temporary steel plates over the affected area of the truck bay to provide adequate protection for upcoming heavy load lifts. Additionally, the licensee revised SLP 3 to require additional risk mitigation measures be taken prior to heavy load lifts in that area.

The finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of design control and adversely affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," Table 4a, for the Mitigating Systems Cornerstone, dated January 10, 2008. The finding was determined to be of very low safety significance because the issue did not result in the actual loss of a safety function. This finding had a cross-cutting aspect in the area of problem identification and resolution, corrective action program component, because the staff did not take appropriate corrective actions to address safety issues in a timely manner, commensurate with their safety significance. Specifically, in 2008, when questions were raised by licensee staff regarding the adequacy of SLP-3, the SLP was not revised (P.1(d)).

Inspection Report# : [2009005](#) (pdf)

Significance:  Dec 31, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Momentary Loss Of Unit 2 Reactor Vessel Level Indication In The Control Room

A self-revealed finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for performing an Instrumentation and Control procedure that was inappropriate to the circumstances, and resulted in the momentary loss of all available channels of reactor vessel level indication in the control room. As part of the immediate corrective actions, the licensee suspended the performance of the procedure and sent an operator into containment to verify reactor vessel level via the local standpipe level indicator and to ensure level indication was reestablished. Additionally, the licensee applied a work planning logic-tie to this activity to ensure the reactor was de-fueled prior to performing this calibration and was currently evaluating the need for revisions to the procedure.

The finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of procedure quality and adversely affected the associated cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors assessed the significance of the finding in accordance with Inspection Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process," and determined that this issue required a Phase 2

analysis since the finding increased the likelihood of a loss of reactor coolant system inventory. The inspectors and a senior reactor analyst determined through the analysis that this issue is best characterized as a finding of very low safety significance. This finding had a cross-cutting aspect in the area of human performance, work control component, in that the licensee did not appropriately coordinate work activities for the existing plant conditions to ensure the operational impact on reactor vessel level indication while at a water level above reduced inventory was fully understood (H.3(b)).

Inspection Report# : [2009005](#) (pdf)

Significance:  Dec 18, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Errors Found in the Room Ventilation Calculation for G-01 and G-02

A finding of very low safety-significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control" was identified by the inspectors for the licensee's failure to adequately calculate the maximum room temperature for G-01 and G-02. Specifically, the licensee's calculation 2005-0054 failed to incorporate the design basis described in Technical Specification (TS) bases 3.8.1 related to the numbers of fire dampers associated with G-01 and G-02 exhaust fans that must be opened to maintain room temperature. The calculation also failed to demonstrate that the temperature stratification close to the combustion air intake filter was acceptable. Instead, the calculation only considered the bulk air temperature in the room. The licensee subsequently entered these concerns into their corrective action program as AR 01162599 and AR 01162759.

The finding was determined to be more than minor because the finding was similar to IMC 0612, Appendix E, Example (3.J). The calculation errors were significant in that there was reasonable doubt that the maximum room temperature would not exceed the value of the Vendor Technical manual. The finding impacted the Mitigating System cornerstone of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee did not ensure that the maximum room temperature of EDG-1 and EDG-2 would not exceed 115 degrees Fahrenheit (F), which is required to be maintained to ensure that the EDGs will perform their safety function during a design basis accident when the outside air temperature was 95 degrees Fahrenheit. The finding was of very low safety-significance based on a Phase 1 screening in accordance with IMC 0609, Appendix A, A Significance Determination of Reactor Inspection Findings for At-Power Situations." This finding was not associated with a cross-cutting aspect because the finding was not indicative of the licensee's current performance.

Inspection Report# : [2009007](#) (pdf)

Significance:  Jun 30, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Seismic Assessment Of Temporary Cable Installations Above Motor-Driven Auxiliary Feedwater Pumps

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure of the licensee's modification process to ensure that new 4160-volt cables installed for proposed auxiliary feedwater (AFW) pump motor replacements were installed in accordance with applicable regulatory requirements. Specifically, no seismic design evaluation was completed prior to the installation of the cable coils suspended above the existing motor-driven AFW pumps for over 6 months. In response to the issue, the licensee installed a new restraint designed to meet seismic criteria and completed calculations that showed the as-left condition of the modification did not challenge operability.

This performance deficiency was more than minor because it was associated with the Mitigating System Cornerstone attribute of design control and adversely affected the cornerstone objectives of ensuring the availability, reliability, and capability of systems to respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, once identified, the modification required rework to comply with applicable design requirements. The inspectors determined the finding was of very low safety significance (Green) because the issue did not result in the actual loss of a safety function. The inspectors also determined the finding has a cross cutting aspect in the area of

human performance, work control, because the licensee failed to incorporate risk insights and planned contingencies into work plans (H.3(a)).

Inspection Report# : [2009003](#) (pdf)

Significance:  Jun 30, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Inadequate Work Instructions And Procedures For 2P-11B Component Cooling Water Pump Maintenance

A finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self revealed for the failure to have adequate work instructions and procedures in place for the March 2009 repair of the 2P 11B component cooling water (CCW) pump. Specifically, the work instructions did not contain sufficient guidance to ensure the proper installation, alignment, and adequacy of material conditions for reuse, of critical pump components. As a result, the CCW pump was returned to service, while still in a degraded state, and required an additional entry into a technical specification action condition 2 weeks later for unplanned corrective maintenance to replace components and repair an oil leak. In response to the issues, the licensee overhauled the pump and performed an apparent cause evaluation, which identified additional long term corrective actions.

The finding was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the CCW pump was degraded with an oil leak from the inboard bearing motor side oil seal and may not have been able to fulfill the 30-day mission time of the pump. The inspectors determined that the finding was of very low safety significance (Green) because the finding did not involve a design or qualification deficiency, did not represent an actual loss of safety function, or represent a single train loss of safety function for greater than the Technical Specification-allowed outage time, and was not potentially risk-significant for external events. The inspectors also determined that this finding has a cross-cutting aspect in the area of human performance, resources, because the level of training provided to the station personnel limited their ability to identify technical procedural deficiencies encountered during pump maintenance (H.2(b)).

Inspection Report# : [2009003](#) (pdf)

Significance:  Jun 30, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Conservative Technical Specification Limit Value For The 48-Hour Diesel Fuel Oil Storage Volume

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," involving the diesel fuel oil storage volume for the emergency diesel generators (EDGs). Specifically, the licensee failed to account for the fuel consumption of a second EDG when establishing the value for the Technical Specification limit for the 48-hour diesel fuel oil storage volume. In response to the issue, the licensee implemented compensatory actions to maintain an adequate fuel volume.

This performance deficiency was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring availability of the EDG to respond to initiating events to prevent undesirable consequences. This finding was of very low safety significance (Green) because the inspectors determined that the finding was a design deficiency confirmed not to result in loss of operability or functionality and the finding screened as Green using the Significance Determination Process Phase 1 screening worksheet. The inspectors did not identify a cross cutting aspect associated with this finding because the performance deficiency occurred many years ago.

Inspection Report# : [2009003](#) (pdf)

Significance:  Jun 30, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Work Instructions For South Service Water Header Work

. The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criteria V, "Instructions, Procedures and Drawings," for the failure to have work instructions and procedures commensurate with the risk associated with maintenance on the south service water (SW) system header. Specifically, the licensee did not have work instructions and procedures that assigned appropriate operator actions and contained contingency plans to rapidly restore the header to service if directed by the shift manager. The licensee entered this issue into the corrective action system and made procedure changes for work affecting the operability of a SW header.

This finding was determined to be more than minor because the finding was associated with the Mitigating System Cornerstone attribute of procedure quality and adversely affected the cornerstone objectives of ensuring the availability, reliability, and capability of systems to respond to initiating events to prevent undesirable consequences. Specifically, the work instructions for the maintenance activity did not incorporate the risk associated with the loss of all SW, since this system is the only safety-related system that provides cooling water to plant systems required to respond to initiating events. The inspectors determined the finding to be of very low safety significance (Green) because the issue did not result in the actual loss of a safety function. The inspectors also determined the finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to incorporate risk insights and planned contingencies into work plans (H.3(a)).

Inspection Report# : [2009003](#) (pdf)

Barrier Integrity

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Evaluate Seismic Piping Interactions

A finding of very low safety significance and an associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the licensee's failure to evaluate seismic piping interactions. Specifically, for a plant configuration where the stem of a spent fuel pool cooling system valve contacted an adjacent service water pipe, the licensee's evaluation to demonstrate that the existing spent fuel pool cooling system piping and valves met the design basis acceptance criteria of United States of America Standard (USAS) B31.1-1967 used a method of analysis that did not evaluate the dynamic effect of impact forces as specified by the design basis piping code. The licensee entered this issue into its corrective action program.

The finding was determined to be more than minor because it was associated with the Barrier Integrity Cornerstone attribute of design control and affected the cornerstone objective of providing reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, compliance with the seismic Category I design basis requirements of United States of America Standard (USAS) B31.1-1967 was to ensure valve SF-2, the valve connection between two sections of spent fuel pool cooling system piping, would function as required during a seismic Category I design basis event. The finding screened as having very low safety significance (Green) because it was a design deficiency of the structural integrity of the spent fuel pool cooling piping system that: did not result in loss of cooling to the spent fuel pool; did not result from fuel handling errors that caused damage to fuel clad integrity or a dropped assembly; and did not result in loss of spent fuel pool inventory greater than 10 percent of spent fuel pool volume. The finding had no cross-cutting aspect because it was a legacy design issue, not reflective of current performance.

Inspection Report# : [2010002](#) (pdf)

Significance: G Dec 31, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure To Ensure Adequate Control Of Foreign Material In Safety-Related Systems

A self-revealed finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for the failure to ensure adequate control of foreign material in accordance with the requirements of procedure NP 8.4.10, "Exclusion of Foreign Material from Plant Components and Systems." Specifically, on October 17, 2009, foreign material was discovered inside the 2SI-897B valve after the valve failed to properly stroke during the performance of procedure IT 215, "SI [safety injection] Valves - Cold Shutdown." The licensee took prompt corrective actions to repair the valve and perform an extent-of-condition review. Additionally, upon entering the issue into its corrective action program, the licensee performed a causal evaluation to determine any additional corrective actions.

The finding was more than minor because it was associated with the Barrier Integrity Cornerstone attribute of human performance and adversely affected the associated cornerstone objective of providing reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, due to the interference caused by the foreign material inside the 2SI 897B valve, the valve would not have been able to perform its safety function to close during the initiation of the post LOCA (loss of coolant accident) sump-recirculation phase of safety injection. The inspectors determined the finding could be evaluated in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a, dated January 10, 2008. The finding was determined to be of very low safety significance because the issue did not represent a degradation of the radiological barrier function provided for the control room, the auxiliary building, or the spent fuel pool; represent a degradation of the barrier function of the control room against smoke or a toxic atmosphere; represent an actual open pathway in the physical integrity of reactor containment (valves, airlocks, containment isolation system (logic and instrumentation)), and heat removal components; or involve an actual reduction in function of hydrogen ignitors in the reactor containment. No cross cutting aspect was identified because the foreign material was determined to have been introduced into the system in the past and was not considered indicative of current performance.

Inspection Report# : [2009005](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Significance: G Mar 31, 2010

Identified By: NRC

Item Type: FIN Finding

Inadequate Communications, Incomplete As-Low-As-Is-Reasonably-Achievable Job Planning And Ineffective Implementation Of Radiological Work Controls

The inspectors identified a finding of very low-safety-significance for inadequate as-low-as-is-reasonably achievable (ALARA) job planning and ineffective implementation of radiological work controls. This issue adversely impacted the licensee's ability to minimize dose for the containment sump fibrous insulation removal project during the Unit 2 Refueling Outage (U2R30). Specifically, radiological controls were not effectively implemented to reduce ambient radiation levels and minimize in-field work hours for craft personnel. This resulted in an actual dose outcome that was not consistent with the planned, intended dose for work associated with the fibrous insulation removal project. Corrective actions were implemented to address the organizational communication deficiencies that lead to the incomplete ALARA job planning and ineffective implementation of radiological work controls for the project.

The finding was more than minor because it impacted the Occupational Radiation Safety

Cornerstone objective for ensuring adequate protection of worker health and safety from exposure to radiation in the attribute of program and process for ALARA planning, in that, incomplete ALARA job planning and radiological work control deficiencies contributed to an actual increase in worker doses in excess of 5 person-rem and exceeded the licensee's initial intended dose estimates by more than 50 percent. The finding did not involve: an overexposure; a substantial potential for an overexposure; or an impaired ability to assess dose. While the finding involved ALARA planning and controls, the 3-year rolling average dose for the Point Beach Nuclear Plant was less than the significance determination process threshold of 135-person-rem for pressurized water reactors at the time the performance deficiency occurred. Therefore, the inspectors determined that this is a finding of very low safety significance. The finding had a cross-cutting aspect in the area of human performance in decision-making, in that, the licensee did not communicate decisions and the basis for decisions to personnel who have a need to know the information in order to perform work safely in a timely manner (H.1(c)).
Inspection Report# : [2010002](#) (*pdf*)

Public Radiation Safety

Significance:  Dec 31, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure To Maintain Proper Control Of Radioactive Material Within The Radiologically Controlled Area

A self-revealed finding of very low safety significance and associated Non-Cited Violation of 10 CFR 20.1101(b) was identified for the failure to adequately control radioactive material to prevent its migration outside the radiologically controlled area (RCA), as required by licensee procedures. On May 21, 2009, a contract worker performing inspections of the main electrical transformers located outside the RCA picked-up a wadded-ball of debris (unmarked tape) and placed it in his front pants pocket. The debris was later found to be radioactively contaminated when the worker alarmed the protected area exit radiation monitors a few hours later as he attempted to leave the site. The tape was likely used to cover contaminated hoses that were previously used within the Point Beach RCA, but had escaped the licensee's control and migrated (blew) into the transformer area outdoors where it was found by the worker. The licensee's storage of radioactive material in an outdoor satellite RCA and/or the licensee's radioactive material control practices during refueling outages when the containment building equipment hatch was open to the environment led to the escape of the material outside the RCA. The contractor's assigned work duties should not have involved exposure to radioactive material; consequently, the worker was unnecessarily exposed to radiation from the contaminated tape. A dose evaluation completed by the licensee's consultant determined that the effective dose equivalent to the worker's thigh from exposure to the contaminated ball of tape was approximately one mrem. The licensee's corrective action called for expanded radiation protection oversight during movement of material in outdoor areas. Procedures were revised to include a post outage walkdown of outdoor areas near the RCA yard. Additionally, the licensee planned to construct an enclosure so that storage/transfer of contaminated materials could be performed indoors.

The finding was more than minor because it impacted the program and process attribute of the Public Radiation Safety Cornerstone and adversely affected the cornerstone objective of ensuring adequate protection of public health and safety from exposure to radiation, in that, unnecessary radiation exposure was received by an individual from inadequately controlled radioactive material. The finding was determined to be of very low safety significance because: (1) it involved a radioactive material control problem that was contrary to NRC requirements and the licensee's procedure; and (2) the dose impact to a member of the public (the contract worker) within the licensee's restricted area was less than 5 millirem total effective dose equivalent. The cause of the radioactive material control problem involved a cross-cutting component in the human performance area for inadequate work control, in that, job site conditions including environmental conditions (high winds, night time work, etc.) impacted human performance and consequently, radiological safety, during movement of material/equipment in outdoor areas (H.3.(a)).

Inspection Report# : [2009005](#) (*pdf*)

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : May 26, 2010

Point Beach 2

2Q/2010 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO FOLLOW PROCEDURES NEEDED TO MAINTAIN EQUIPMENT OPERABILITY WITH HAZARD BARRIERS OUT-OF-SERVICE.

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions Procedures, and Drawings," was identified by the inspectors for the licensee's failure to follow procedural/instructional guidance contained in a temporary procedure for the maintenance of high energy line break (HELB) barriers. Specifically, on June 25, 2010, the licensee placed a wedge under the control room door, a HELB barrier, contrary to the guidance contained in Operations Notebook procedure/instruction, "HELB Barrier/Vent Path Temporary Guidance." The licensee entered this item into its corrective action program.

This performance deficiency was more than minor because it was associated with the Initiating Events Cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring the availability and reliability of equipment needed to limit the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. Specifically, the failure to maintain the control room door available as a supporting structure, system, or component (SSC) for control room equipment availability/operability during a HELB impacted the reliability and the operability of affected control room SSCs. The finding screened as having very low safety significance (Green) because of its short exposure, approximately 0.5 hours. The finding had a cross cutting aspect in the area of human performance, work practices, because the licensee's staff was familiar with and had been briefed on, "HELB Barrier/Vent Path Temporary Guidance" in the Operations Notebook yet had failed to implement human error prevention techniques such as pre job briefing or peer checking, which, if performed, could have ensured that maintenance on the control room door was performed as required by the operations notebook procedure (H.4(a)).

Inspection Report# : [2010003](#) (*pdf*)

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Untimely Corrective Actions To Address Longstanding Issue Of Submerged Cables

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified by the inspectors for the licensee's failure to implement timely corrective actions to address the longstanding issue of submerged, medium voltage, underground cables at Point Beach. Specifically, this issue was first identified in 1997, with numerous condition reports written since that time, and in January 2008, it was associated with a significant condition adverse to quality. The licensee entered this issue into its corrective action program. Corrective actions completed include increased monitoring and pumping of manholes; proposed actions include design changes to support automatic monitoring and/or water removal from the manholes.

The finding was more than minor because it was associated with the Initiating Events Cornerstone attribute of protection against external factors and affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenged critical safety functions during shutdown as well as power operations. Specifically, the failure to correct the submerged cable issue in a timely manner; if left uncorrected, would lead to other cable failures as a result of the continued cable degradation. The finding screened as having very low safety significance (Green) because it did not contribute to both the likelihood of a reactor trip and the likelihood that

mitigation equipment or functions would not be available. The finding had a cross-cutting aspect in the area of human performance, resources, because the licensee did not appropriately maintain long-term plant safety by maintenance of design margins, minimization of longstanding equipment issues, minimizing preventive maintenance deferrals, and ensuring maintenance and engineering backlogs were managed low enough to support safety (H.2(a)).
Inspection Report# : [2010002](#) (pdf)

Mitigating Systems

Significance:  Jun 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO ENTER ABNORMAL OPERATING PROCEDURE DURING TORNADO WARNING.

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to implement a required abnormal operating procedure (AOP) during a period of impending severe weather. Specifically, the licensee failed to enter AOP 13C, "Severe Weather Conditions," during a tornado warning issued by the National Weather Service for the specific location of the plant. The licensee immediately entered the issue into its corrective action program and conducted an apparent cause evaluation of the conditions.

This performance deficiency was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of protection against external events and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding was determined to be of very low safety significance (Green) because it did not involve the loss or degradation of equipment or function specifically designed to mitigate a seismic, flooding, or severe weather initiating event (e.g., seismic snubbers, flooding barriers, tornado doors), and did not involve the total loss of any safety function. This finding has a cross cutting aspect in the area of human performance, resources, because the licensee did not ensure that personnel, equipment, procedures, and other resources were available and adequate to assure nuclear safety. Specifically, the entry conditions in AOP 13C were out of date and failed to provide an adequate nexus between the purpose and instructions of the procedure (H.2(c)).

Inspection Report# : [2010003](#) (pdf)

Significance:  Jun 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO CONTROL THE DESIGN OF PARTIALLY INSTALLED MODIFICATIONS FOR SEISMIC REQUIREMENTS.

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the failure of the licensee's modification process to ensure that new 480 volt cables, installed for the future repowering of various auxiliary feedwater (AFW) system motor operated valves, were installed in accordance with applicable regulatory requirements. Specifically, a seismic design evaluation was not completed prior to the installation of a cable coil suspended above the 2MS 2020 valve, 2P 29 turbine driven AFW pump steam supply. In response to this issue, the licensee installed more robust restraints that satisfied seismic acceptability criteria and performed an evaluation that showed the interim condition of the modification did not challenge operability. At the conclusion of this inspection period, the licensee was in the process of conducting a root cause evaluation. The inspectors also noted that a very similar issue at this site resulted in the issuance of a NCV in the second quarter of 2009.

This performance deficiency was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of design control and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, once identified, the modification required rework to comply with applicable design requirements. The inspectors determined the finding was of very low safety significance (Green) because the issue did not result in the

actual loss of a safety function. The inspectors also determined the finding has a cross cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to implement appropriate corrective actions for a previous violation with the same performance deficiency (P.1(d)).

Inspection Report# : [2010003](#) (pdf)

Significance:  Jun 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

PROCEDURES WERE NOT APPROPRIATE TO ADEQUATELY VERIFY AND DOCUMENT THE DESIGN OF NEW OR MODIFIED SSCs WITH RESPECT TO SEISMIC II/I INTERACTIONS.

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the failure to provide procedures that were appropriate to verify and document the design of new or modified SSCs with respect to seismic II/I interactions. Specifically, the procedures used for seismic II/I interaction evaluations of new or modified SSCs did not provide guidance for evaluating equipment that was not represented in the earthquake experience or generic testing equipment classes under the scope of the Seismic Qualification Utility Group methodology. Also, no formal guidance was incorporated in modification and seismic procedures to document seismic II/I interaction evaluations. As a result, the licensee did not perform an evaluation that was in accordance with the licensing basis to verify the design of the "B" containment sump strainers of Units 1 and 2 with respect to potential seismic II/I interactions. The licensee entered this issue into its corrective action program.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of protection against external events and adversely affected the cornerstone objective of ensuring the capability of systems that respond to initiating events to prevent undesirable consequences. This finding was of very low safety significance (Green) because it was a qualification deficiency confirmed not to result in loss of operability or functionality. The inspectors determined that the finding had a cross cutting aspect in the area of problem identification and resolution, self and independent assessments, because the licensee did not conduct self assessments of the Seismic Qualification Utility Group program (P.3(a)).

Inspection Report# : [2010003](#) (pdf)

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Inappropriate Application Of A Dedicated Operator During A System Venting Surveillance

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR 50.65(a)(4) was identified by the inspectors for the failure to properly assess risk that resulted from risk-significant maintenance being performed on the residual heat removal, safety injection, and containment spray systems. Specifically, the licensee inappropriately applied criteria for the use of a dedicated operator to meet availability requirements. As part of its corrective actions, the licensee stopped work that required the use of a dedicated operator pending further evaluation.

The issue was more than minor because the licensee's risk assessment for January 12, 2010, failed to consider multiple systems unavailable during maintenance. Specifically, the failure to account for the unavailability of the residual heat removal, safety injection, and containment spray systems, resulted in an inadequate daily risk assessment and could affect the unavailability time of this system in related performance and maintenance rule indicators. The inspectors evaluated the finding using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment K, Maintenance Risk Assessment and Risk Management Significance Determination Process, dated May 19, 2005, and determined the issue screened as having very low safety significance, because the incremental conditional core damage probability was less than 1E-6 due to the test condition lasting only four hours. This finding had a cross-cutting aspect in human performance, decision-making, because the licensee did not have a process or use a

systematic approach regarding facets of a dedicated operator (H.1(a)).

Inspection Report# : [2010002](#) (pdf)

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Follow Temporary Modification Procedure

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to follow the temporary modifications procedure FP-E-MOD-03, Revision 6. Specifically, the Applicability section of this procedure was not properly applied to the temporary condensate storage tank (CST) modification such that the system was not appropriately characterized as a temporary modification. As a result, the licensee failed to adequately document an evaluation of the potential impacts to operating equipment. As of the conclusion of the inspection, the licensee had entered this issue into its corrective action program.

The finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of design control and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the licensee inappropriately applied the exemption criteria of the temporary modification procedure to the fill point connected to the newly classified "vent" of the permanent CST and failed to assess the impact of the temporary CST system on plant design. The finding screened as having very low safety significance (Green) because the finding was not a design or qualification deficiency resulting in a loss of functionality, did not represent a loss of system safety function or loss of a single train for greater than its allowed technical specification time, and did not screen as potentially risk significant due to seismic, flooding, or severe weather initiating events. This finding had a cross-cutting aspect in the area of human performance, decision-making, because the licensee did not appropriately use conservative assumptions in decision-making and verify the validity of underlying assumptions for the temporary CST modification (H.1(b)).

Inspection Report# : [2010002](#) (pdf)

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Establish Required Fire Watches

A finding of very low safety significance and associated Non-Cited Violation of Technical Specification 5.4.1.h for Units 1 and 2 was identified by the inspectors for the licensee's failure to establish appropriate fire watches required as compensatory 3 Enclosure

measures to address identified fire protection impairments. Specifically, on three occasions, the licensee failed to issue, and properly implement, fire watch surveillances as required by procedure OM 3.27. The licensee had entered all instances into its corrective action program.

The finding was more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of protection against external factors (fire) and affected the cornerstone objective of ensuring the availability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to implement fire watches required as compensatory measures degraded the defense-in-depth elements of the fire protection program that is necessary to ensure safe shutdown in the event of a fire. The issue was of very low safety significance based on the low degradation rating for the finding. The finding had a cross-cutting aspect in the area of human

performance, resources, because the licensee's preliminary apparent cause evaluation attributed the underlying cause of these events to less than adequate procedures, or procedures that did not adequately link to each other, and pre-job briefing materials that did not address fire protection considerations (H.2(c)).

Inspection Report# : [2010002](#) (pdf)

Significance: SL-IV Feb 17, 2010

Identified By: NRC

Item Type: VIO Violation

Inaccurate Information Relating to Signatures on Ignition Control Procedures

A Severity Level IV, Cited Violation of 10 CFR 50.9(a) "Completeness and Accuracy of Information," was identified by the inspectors for the licensee's failure to maintain complete and accurate information required by the Commission. Specifically, a Point Beach Nuclear Plant employee and two contract employees from Day and Zimmermann Nuclear Power Services, signed Ignition Control Permits without the authorized person inspecting the areas as required by the ignition control procedure NP 1.9.13.

The violation affected the NRC's ability to perform its regulatory function because it involved willfulness. Therefore, it was evaluated using Traditional Enforcement. The NRC determined that a Severity Level IV violation was appropriate due to the willful nature of some violation examples. The NRC determined that the violation should be cited because: (1) the violation was NRC-identified; and (2) it was willful; and (3) it involved a first-line supervisor. The inspectors determined that this violation was a performance deficiency, but because the underlying work was always completed with a fire watch present, that deficiency was minor in nature. As such, no cross-cutting aspect was evaluated for the minor performance deficiency.

Inspection Report# : [2010008](#) (pdf)

Inspection Report# : [2010010](#) (pdf)

Significance:  Dec 31, 2009

Identified By: NRC

Item Type: FIN Finding

Failure To Meet Generic Letter 89-13 Program Requirement For Mussel Control

The inspectors identified a finding of very low safety significance for the failure to meet a commitment made in the Generic Letter 89-13 program. Specifically, the program states that biocide treatments at Point Beach are performed at least annually and are directly applied to the service water system for mussel control and eradication to prevent fouling of safety related heat exchangers. However, the 2008 biocide treatment for mussel control was deferred until 2009. After the treatment in 2009, greater than expected tube blockage and reduced flow to safety-related heat exchangers due to mussels was identified. In response, the licensee adjusted flow through the affected heat exchangers and opened and cleaned the heat exchangers to remove mussels that caused the tube blockage. The licensee took corrective actions to ensure that future annual biocide treatments would be conducted annually.

This finding was more than minor because it was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and adversely affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," Table 4a, for the Mitigating Systems Cornerstone, dated January 10, 2008. The finding was determined to be of very low safety significance because the issue did not result in the actual loss of a safety function. This finding did not involve a violation of NRC regulatory requirements. The inspectors determined this performance deficiency was not indicative of current performance; therefore, no cross-cutting aspect was identified.

Inspection Report# : [2009005](#) (pdf)

Significance:  Dec 31, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Update Safe Load Path Manual To Include Safety-Related Cable Locations

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, Design Control, for the failure to update the Safe Load Path Manual for the Unit 2 turbine building (SLP 3) as part of the mid-1990's modification that added the G 03 and G 04 emergency diesel generators. Specifically, it was identified that SLP-3 allowed unrestricted load lifts over the Unit 2 turbine building truck bay area, based upon a 1980's evaluation, and was not updated to reflect a modification that added safety-related cables for emergency diesel generators under the Unit 2 truck bay. Due to the close proximity of the "A" train cables to the "B" train cables, a loss of both trains of emergency alternating current (AC) power could result if the underground cables were disabled by a dropped load of sufficient magnitude. The licensee addressed the immediate concern by installing temporary steel plates over the affected area of the truck bay to provide adequate protection for upcoming heavy load lifts. Additionally, the licensee revised SLP 3 to require additional risk mitigation measures be taken prior to heavy load lifts in that area.

The finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of design control and adversely affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," Table 4a, for the Mitigating Systems Cornerstone, dated January 10, 2008. The finding was determined to be of very low safety significance because the issue did not result in the actual loss of a safety function. This finding had a cross-cutting aspect in the area of problem identification and resolution, corrective action program component, because the staff did not take appropriate corrective actions to address safety issues in a timely manner, commensurate with their safety significance. Specifically, in 2008, when questions were raised by licensee staff regarding the adequacy of SLP-3, the SLP was not revised (P.1(d)).

Inspection Report# : [2009005](#) (pdf)

Significance:  Dec 31, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Momentary Loss Of Unit 2 Reactor Vessel Level Indication In The Control Room

A self-revealed finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for performing an Instrumentation and Control procedure that was inappropriate to the circumstances, and resulted in the momentary loss of all available channels of reactor vessel level indication in the control room. As part of the immediate corrective actions, the licensee suspended the performance of the procedure and sent an operator into containment to verify reactor vessel level via the local standpipe level indicator and to ensure level indication was reestablished. Additionally, the licensee applied a work planning logic-tie to this activity to ensure the reactor was de-fueled prior to performing this calibration and was currently evaluating the need for revisions to the procedure.

The finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of procedure quality and adversely affected the associated cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors assessed the significance of the finding in accordance with Inspection Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process," and determined that this issue required a Phase 2 analysis since the finding increased the likelihood of a loss of reactor coolant system inventory. The inspectors and a senior reactor analyst determined through the analysis that this issue is best characterized as a finding of very low safety significance. This finding had a cross-cutting aspect in the area of human performance, work control component, in that the licensee did not appropriately coordinate work activities for the existing plant conditions to ensure the operational impact on reactor vessel level indication while at a water level above reduced inventory was fully understood (H.3(b)).

Inspection Report# : [2009005](#) (pdf)

Significance: G Dec 18, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Errors Found in the Room Ventilation Calculation for G-01 and G-02

A finding of very low safety-significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control" was identified by the inspectors for the licensee's failure to adequately calculate the maximum room temperature for G-01 and G-02. Specifically, the licensee's calculation 2005-0054 failed to incorporate the design basis described in Technical Specification (TS) bases 3.8.1 related to the numbers of fire dampers associated with G-01 and G-02 exhaust fans that must be opened to maintain room temperature. The calculation also failed to demonstrate that the temperature stratification close to the combustion air intake filter was acceptable. Instead, the calculation only considered the bulk air temperature in the room. The licensee subsequently entered these concerns into their corrective action program as AR 01162599 and AR 01162759.

The finding was determined to be more than minor because the finding was similar to IMC 0612, Appendix E, Example (3.J). The calculation errors were significant in that there was reasonable doubt that the maximum room temperature would not exceed the value of the Vendor Technical manual. The finding impacted the Mitigating System cornerstone of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee did not ensure that the maximum room temperature of EDG-1 and EDG-2 would not exceed 115 degrees Fahrenheit (F), which is required to be maintained to ensure that the EDGs will perform their safety function during a design basis accident when the outside air temperature was 95 degrees Fahrenheit. The finding was of very low safety-significance based on a Phase 1 screening in accordance with IMC 0609, Appendix A, A Significance Determination of Reactor Inspection Findings for At-Power Situations." This finding was not associated with a cross-cutting aspect because the finding was not indicative of the licensee's current performance.

Inspection Report# : [2009007](#) (pdf)

Barrier Integrity

Significance: G Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Evaluate Seismic Piping Interactions

A finding of very low safety significance and an associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the licensee's failure to evaluate seismic piping interactions. Specifically, for a plant configuration where the stem of a spent fuel pool cooling system valve contacted an adjacent service water pipe, the licensee's evaluation to demonstrate that the existing spent fuel pool cooling system piping and valves met the design basis acceptance criteria of United States of America Standard (USAS) B31.1-1967 used a method of analysis that did not evaluate the dynamic effect of impact forces as specified by the design basis piping code. The licensee entered this issue into its corrective action program.

The finding was determined to be more than minor because it was associated with the Barrier Integrity Cornerstone attribute of design control and affected the cornerstone objective of providing reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, compliance with the seismic Category I design basis requirements of United States of America Standard (USAS) B31.1-1967 was to ensure valve SF-2, the valve connection between two sections of spent fuel pool cooling system piping, would function as required during a seismic Category I design basis event. The finding screened as having very low safety significance (Green) because it was a design deficiency of the structural integrity of the spent fuel pool

cooling piping system that: did not result in loss of cooling to the spent fuel pool; did not result from fuel handling errors that caused damage to fuel clad integrity or a dropped assembly; and did not result in loss of spent fuel pool inventory greater than 10 percent of spent fuel pool volume. The finding had no cross-cutting aspect because it was a legacy design issue, not reflective of current performance.
Inspection Report# : [2010002](#) (pdf)

Significance:  Dec 31, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure To Ensure Adequate Control Of Foreign Material In Safety-Related Systems

A self-revealed finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for the failure to ensure adequate control of foreign material in accordance with the requirements of procedure NP 8.4.10, "Exclusion of Foreign Material from Plant Components and Systems." Specifically, on October 17, 2009, foreign material was discovered inside the 2SI-897B valve after the valve failed to properly stroke during the performance of procedure IT 215, "SI [safety injection] Valves - Cold Shutdown." The licensee took prompt corrective actions to repair the valve and perform an extent-of-condition review. Additionally, upon entering the issue into its corrective action program, the licensee performed a causal evaluation to determine any additional corrective actions.

The finding was more than minor because it was associated with the Barrier Integrity Cornerstone attribute of human performance and adversely affected the associated cornerstone objective of providing reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, due to the interference caused by the foreign material inside the 2SI 897B valve, the valve would not have been able to perform its safety function to close during the initiation of the post LOCA (loss of coolant accident) sump-recirculation phase of safety injection. The inspectors determined the finding could be evaluated in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a, dated January 10, 2008. The finding was determined to be of very low safety significance because the issue did not represent a degradation of the radiological barrier function provided for the control room, the auxiliary building, or the spent fuel pool; represent a degradation of the barrier function of the control room against smoke or a toxic atmosphere; represent an actual open pathway in the physical integrity of reactor containment (valves, airlocks, containment isolation system (logic and instrumentation)), and heat removal components; or involve an actual reduction in function of hydrogen ignitors in the reactor containment. No cross cutting aspect was identified because the foreign material was determined to have been introduced into the system in the past and was not considered indicative of current performance.

Inspection Report# : [2009005](#) (pdf)

Emergency Preparedness

Occupational Radiation Safety

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: FIN Finding

Inadequate Communications, Incomplete As-Low-As-Is-Reasonably-Achievable Job Planning And Ineffective Implementation Of Radiological Work Controls

The inspectors identified a finding of very low-safety-significance for inadequate as-low-as-is-reasonably achievable (ALARA) job planning and ineffective implementation of radiological work controls. This issue adversely impacted the licensee's ability to minimize dose for the containment sump fibrous insulation removal project during the Unit 2

Refueling Outage (U2R30). Specifically, radiological controls were not effectively implemented to reduce ambient radiation levels and minimize in-field work hours for craft personnel. This resulted in an actual dose outcome that was not consistent with the planned, intended dose for work associated with the fibrous insulation removal project. Corrective actions were implemented to address the organizational communication deficiencies that lead to the incomplete ALARA job planning and ineffective implementation of radiological work controls for the project.

The finding was more than minor because it impacted the Occupational Radiation Safety Cornerstone objective for ensuring adequate protection of worker health and safety from exposure to radiation in the attribute of program and process for ALARA planning, in that, incomplete ALARA job planning and radiological work control deficiencies contributed to an actual increase in worker doses in excess of 5 person-rem and exceeded the licensee's initial intended dose estimates by more than 50 percent. The finding did not involve: an overexposure; a substantial potential for an overexposure; or an impaired ability to assess dose. While the finding involved ALARA planning and controls, the 3-year rolling average dose for the Point Beach Nuclear Plant was less than the significance determination process threshold of 135-person-rem for pressurized water reactors at the time the performance deficiency occurred. Therefore, the inspectors determined that this is a finding of very low safety significance. The finding had a cross-cutting aspect in the area of human performance in decision-making, in that, the licensee did not communicate decisions and the basis for decisions to personnel who have a need to know the information in order to perform work safely in a timely manner (H.1(c)).

Inspection Report# : [2010002](#) (*pdf*)

Public Radiation Safety

Significance:  Dec 31, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure To Maintain Proper Control Of Radioactive Material Within The Radiologically Controlled Area

A self-revealed finding of very low safety significance and associated Non-Cited Violation of 10 CFR 20.1101(b) was identified for the failure to adequately control radioactive material to prevent its migration outside the radiologically controlled area (RCA), as required by licensee procedures. On May 21, 2009, a contract worker performing inspections of the main electrical transformers located outside the RCA picked-up a wadded-ball of debris (unmarked tape) and placed it in his front pants pocket. The debris was later found to be radioactively contaminated when the worker alarmed the protected area exit radiation monitors a few hours later as he attempted to leave the site. The tape was likely used to cover contaminated hoses that were previously used within the Point Beach RCA, but had escaped the licensee's control and migrated (blew) into the transformer area outdoors where it was found by the worker. The licensee's storage of radioactive material in an outdoor satellite RCA and/or the licensee's radioactive material control practices during refueling outages when the containment building equipment hatch was open to the environment led to the escape of the material outside the RCA. The contractor's assigned work duties should not have involved exposure to radioactive material; consequently, the worker was unnecessarily exposed to radiation from the contaminated tape. A dose evaluation completed by the licensee's consultant determined that the effective dose equivalent to the worker's thigh from exposure to the contaminated ball of tape was approximately one mrem. The licensee's corrective action called for expanded radiation protection oversight during movement of material in outdoor areas. Procedures were revised to include a post outage walkdown of outdoor areas near the RCA yard. Additionally, the licensee planned to construct an enclosure so that storage/transfer of contaminated materials could be performed indoors.

The finding was more than minor because it impacted the program and process attribute of the Public Radiation Safety Cornerstone and adversely affected the cornerstone objective of ensuring adequate protection of public health and safety from exposure to radiation, in that, unnecessary radiation exposure was received by an individual from inadequately controlled radioactive material. The finding was determined to be of very low safety significance because: (1) it involved a radioactive material control problem that was contrary to NRC requirements and the licensee's procedure; and (2) the dose impact to a member of the public (the contract worker) within the licensee's

restricted area was less than 5 millirem total effective dose equivalent. The cause of the radioactive material control problem involved a cross-cutting component in the human performance area for inadequate work control, in that, job site conditions including environmental conditions (high winds, night time work, etc.) impacted human performance and consequently, radiological safety, during movement of material/equipment in outdoor areas (H.3.(a)).

Inspection Report# : [2009005](#) (*pdf*)

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : September 02, 2010

Point Beach 2

3Q/2010 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO FOLLOW PROCEDURES NEEDED TO MAINTAIN EQUIPMENT OPERABILITY WITH HAZARD BARRIERS OUT-OF-SERVICE.

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions Procedures, and Drawings," was identified by the inspectors for the licensee's failure to follow procedural/instructional guidance contained in a temporary procedure for the maintenance of high energy line break (HELB) barriers. Specifically, on June 25, 2010, the licensee placed a wedge under the control room door, a HELB barrier, contrary to the guidance contained in Operations Notebook procedure/instruction, "HELB Barrier/Vent Path Temporary Guidance." The licensee entered this item into its corrective action program.

This performance deficiency was more than minor because it was associated with the Initiating Events Cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring the availability and reliability of equipment needed to limit the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. Specifically, the failure to maintain the control room door available as a supporting structure, system, or component (SSC) for control room equipment availability/operability during a HELB impacted the reliability and the operability of affected control room SSCs. The finding screened as having very low safety significance (Green) because of its short exposure, approximately 0.5 hours. The finding had a cross cutting aspect in the area of human performance, work practices, because the licensee's staff was familiar with and had been briefed on, "HELB Barrier/Vent Path Temporary Guidance" in the Operations Notebook yet had failed to implement human error prevention techniques such as pre job briefing or peer checking, which, if performed, could have ensured that maintenance on the control room door was performed as required by the operations notebook procedure (H.4(a)).

Inspection Report# : [2010003](#) (*pdf*)

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Untimely Corrective Actions To Address Longstanding Issue Of Submerged Cables

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified by the inspectors for the licensee's failure to implement timely corrective actions to address the longstanding issue of submerged, medium voltage, underground cables at Point Beach. Specifically, this issue was first identified in 1997, with numerous condition reports written since that time, and in January 2008, it was associated with a significant condition adverse to quality. The licensee entered this issue into its corrective action program. Corrective actions completed include increased monitoring and pumping of manholes; proposed actions include design changes to support automatic monitoring and/or water removal from the manholes.

The finding was more than minor because it was associated with the Initiating Events Cornerstone attribute of protection against external factors and affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenged critical safety functions during shutdown as well as power operations. Specifically, the failure to correct the submerged cable issue in a timely manner; if left uncorrected, would lead to other cable failures as a result of the continued cable degradation. The finding screened as having very low safety significance (Green) because it did not contribute to both the likelihood of a reactor trip and the likelihood that

mitigation equipment or functions would not be available. The finding had a cross-cutting aspect in the area of human performance, resources, because the licensee did not appropriately maintain long-term plant safety by maintenance of design margins, minimization of longstanding equipment issues, minimizing preventive maintenance deferrals, and ensuring maintenance and engineering backlogs were managed low enough to support safety (H.2(a)).
Inspection Report# : [2010002](#) (pdf)

Mitigating Systems

Significance:  Jun 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO ENTER ABNORMAL OPERATING PROCEDURE DURING TORNADO WARNING.

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to implement a required abnormal operating procedure (AOP) during a period of impending severe weather. Specifically, the licensee failed to enter AOP 13C, "Severe Weather Conditions," during a tornado warning issued by the National Weather Service for the specific location of the plant. The licensee immediately entered the issue into its corrective action program and conducted an apparent cause evaluation of the conditions.

This performance deficiency was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of protection against external events and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding was determined to be of very low safety significance (Green) because it did not involve the loss or degradation of equipment or function specifically designed to mitigate a seismic, flooding, or severe weather initiating event (e.g., seismic snubbers, flooding barriers, tornado doors), and did not involve the total loss of any safety function. This finding has a cross cutting aspect in the area of human performance, resources, because the licensee did not ensure that personnel, equipment, procedures, and other resources were available and adequate to assure nuclear safety. Specifically, the entry conditions in AOP 13C were out of date and failed to provide an adequate nexus between the purpose and instructions of the procedure (H.2(c)).

Inspection Report# : [2010003](#) (pdf)

Significance:  Jun 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO CONTROL THE DESIGN OF PARTIALLY INSTALLED MODIFICATIONS FOR SEISMIC REQUIREMENTS.

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the failure of the licensee's modification process to ensure that new 480 volt cables, installed for the future repowering of various auxiliary feedwater (AFW) system motor operated valves, were installed in accordance with applicable regulatory requirements. Specifically, a seismic design evaluation was not completed prior to the installation of a cable coil suspended above the 2MS 2020 valve, 2P 29 turbine driven AFW pump steam supply. In response to this issue, the licensee installed more robust restraints that satisfied seismic acceptability criteria and performed an evaluation that showed the interim condition of the modification did not challenge operability. At the conclusion of this inspection period, the licensee was in the process of conducting a root cause evaluation. The inspectors also noted that a very similar issue at this site resulted in the issuance of a NCV in the second quarter of 2009.

This performance deficiency was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of design control and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, once identified, the modification required rework to comply with applicable design requirements. The inspectors determined the finding was of very low safety significance (Green) because the issue did not result in the

actual loss of a safety function. The inspectors also determined the finding has a cross cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to implement appropriate corrective actions for a previous violation with the same performance deficiency (P.1(d)).

Inspection Report# : [2010003](#) (pdf)

Significance:  Jun 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

PROCEDURES WERE NOT APPROPRIATE TO ADEQUATELY VERIFY AND DOCUMENT THE DESIGN OF NEW OR MODIFIED SSCs WITH RESPECT TO SEISMIC II/I INTERACTIONS.

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the failure to provide procedures that were appropriate to verify and document the design of new or modified SSCs with respect to seismic II/I interactions. Specifically, the procedures used for seismic II/I interaction evaluations of new or modified SSCs did not provide guidance for evaluating equipment that was not represented in the earthquake experience or generic testing equipment classes under the scope of the Seismic Qualification Utility Group methodology. Also, no formal guidance was incorporated in modification and seismic procedures to document seismic II/I interaction evaluations. As a result, the licensee did not perform an evaluation that was in accordance with the licensing basis to verify the design of the "B" containment sump strainers of Units 1 and 2 with respect to potential seismic II/I interactions. The licensee entered this issue into its corrective action program.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of protection against external events and adversely affected the cornerstone objective of ensuring the capability of systems that respond to initiating events to prevent undesirable consequences. This finding was of very low safety significance (Green) because it was a qualification deficiency confirmed not to result in loss of operability or functionality. The inspectors determined that the finding had a cross cutting aspect in the area of problem identification and resolution, self and independent assessments, because the licensee did not conduct self assessments of the Seismic Qualification Utility Group program (P.3(a)).

Inspection Report# : [2010003](#) (pdf)

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Inappropriate Application Of A Dedicated Operator During A System Venting Surveillance

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR 50.65(a)(4) was identified by the inspectors for the failure to properly assess risk that resulted from risk-significant maintenance being performed on the residual heat removal, safety injection, and containment spray systems. Specifically, the licensee inappropriately applied criteria for the use of a dedicated operator to meet availability requirements. As part of its corrective actions, the licensee stopped work that required the use of a dedicated operator pending further evaluation.

The issue was more than minor because the licensee's risk assessment for January 12, 2010, failed to consider multiple systems unavailable during maintenance. Specifically, the failure to account for the unavailability of the residual heat removal, safety injection, and containment spray systems, resulted in an inadequate daily risk assessment and could affect the unavailability time of this system in related performance and maintenance rule indicators. The inspectors evaluated the finding using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment K, Maintenance Risk Assessment and Risk Management Significance Determination Process, dated May 19, 2005, and determined the issue screened as having very low safety significance, because the incremental conditional core damage probability was less than 1E-6 due to the test condition lasting only four hours. This finding had a cross-cutting aspect in human performance, decision-making, because the licensee did not have a process or use a

systematic approach regarding facets of a dedicated operator (H.1(a)).

Inspection Report# : [2010002](#) (pdf)

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Follow Temporary Modification Procedure

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to follow the temporary modifications procedure FP-E-MOD-03, Revision 6. Specifically, the Applicability section of this procedure was not properly applied to the temporary condensate storage tank (CST) modification such that the system was not appropriately characterized as a temporary modification. As a result, the licensee failed to adequately document an evaluation of the potential impacts to operating equipment. As of the conclusion of the inspection, the licensee had entered this issue into its corrective action program.

The finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of design control and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the licensee inappropriately applied the exemption criteria of the temporary modification procedure to the fill point connected to the newly classified "vent" of the permanent CST and failed to assess the impact of the temporary CST system on plant design. The finding screened as having very low safety significance (Green) because the finding was not a design or qualification deficiency resulting in a loss of functionality, did not represent a loss of system safety function or loss of a single train for greater than its allowed technical specification time, and did not screen as potentially risk significant due to seismic, flooding, or severe weather initiating events. This finding had a cross-cutting aspect in the area of human performance, decision-making, because the licensee did not appropriately use conservative assumptions in decision-making and verify the validity of underlying assumptions for the temporary CST modification (H.1(b)).

Inspection Report# : [2010002](#) (pdf)

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Establish Required Fire Watches

A finding of very low safety significance and associated Non-Cited Violation of Technical Specification 5.4.1.h for Units 1 and 2 was identified by the inspectors for the licensee's failure to establish appropriate fire watches required as compensatory 3 Enclosure

measures to address identified fire protection impairments. Specifically, on three occasions, the licensee failed to issue, and properly implement, fire watch surveillances as required by procedure OM 3.27. The licensee had entered all instances into its corrective action program.

The finding was more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of protection against external factors (fire) and affected the cornerstone objective of ensuring the availability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to implement fire watches required as compensatory measures degraded the defense-in-depth elements of the fire protection program that is necessary to ensure safe shutdown in the event of a fire. The issue was of very low safety significance based on the low degradation rating for the finding. The finding had a cross-cutting aspect in the area of human

performance, resources, because the licensee's preliminary apparent cause evaluation attributed the underlying cause of these events to less than adequate procedures, or procedures that did not adequately link to each other, and pre-job briefing materials that did not address fire protection considerations (H.2(c)).

Inspection Report# : [2010002](#) (pdf)

Significance: SL-IV Feb 17, 2010

Identified By: NRC

Item Type: VIO Violation

Inaccurate Information Relating to Signatures on Ignition Control Procedures

A Severity Level IV, Cited Violation of 10 CFR 50.9(a) "Completeness and Accuracy of Information," was identified by the inspectors for the licensee's failure to maintain complete and accurate information required by the Commission. Specifically, a Point Beach Nuclear Plant employee and two contract employees from Day and Zimmermann Nuclear Power Services, signed Ignition Control Permits without the authorized person inspecting the areas as required by the ignition control procedure NP 1.9.13.

The violation affected the NRC's ability to perform its regulatory function because it involved willfulness. Therefore, it was evaluated using Traditional Enforcement. The NRC determined that a Severity Level IV violation was appropriate due to the willful nature of some violation examples. The NRC determined that the violation should be cited because: (1) the violation was NRC-identified; and (2) it was willful; and (3) it involved a first-line supervisor. The inspectors determined that this violation was a performance deficiency, but because the underlying work was always completed with a fire watch present, that deficiency was minor in nature. As such, no cross-cutting aspect was evaluated for the minor performance deficiency.

Inspection Report# : [2010008](#) (pdf)

Inspection Report# : [2010010](#) (pdf)

Significance:  Dec 31, 2009

Identified By: NRC

Item Type: FIN Finding

Failure To Meet Generic Letter 89-13 Program Requirement For Mussel Control

The inspectors identified a finding of very low safety significance for the failure to meet a commitment made in the Generic Letter 89-13 program. Specifically, the program states that biocide treatments at Point Beach are performed at least annually and are directly applied to the service water system for mussel control and eradication to prevent fouling of safety related heat exchangers. However, the 2008 biocide treatment for mussel control was deferred until 2009. After the treatment in 2009, greater than expected tube blockage and reduced flow to safety-related heat exchangers due to mussels was identified. In response, the licensee adjusted flow through the affected heat exchangers and opened and cleaned the heat exchangers to remove mussels that caused the tube blockage. The licensee took corrective actions to ensure that future annual biocide treatments would be conducted annually.

This finding was more than minor because it was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and adversely affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," Table 4a, for the Mitigating Systems Cornerstone, dated January 10, 2008. The finding was determined to be of very low safety significance because the issue did not result in the actual loss of a safety function. This finding did not involve a violation of NRC regulatory requirements. The inspectors determined this performance deficiency was not indicative of current performance; therefore, no cross-cutting aspect was identified.

Inspection Report# : [2009005](#) (pdf)

Significance:  Dec 31, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Update Safe Load Path Manual To Include Safety-Related Cable Locations

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, Design Control, for the failure to update the Safe Load Path Manual for the Unit 2 turbine building (SLP 3) as part of the mid-1990's modification that added the G 03 and G 04 emergency diesel generators. Specifically, it was identified that SLP-3 allowed unrestricted load lifts over the Unit 2 turbine building truck bay area, based upon a 1980's evaluation, and was not updated to reflect a modification that added safety-related cables for emergency diesel generators under the Unit 2 truck bay. Due to the close proximity of the "A" train cables to the "B" train cables, a loss of both trains of emergency alternating current (AC) power could result if the underground cables were disabled by a dropped load of sufficient magnitude. The licensee addressed the immediate concern by installing temporary steel plates over the affected area of the truck bay to provide adequate protection for upcoming heavy load lifts. Additionally, the licensee revised SLP 3 to require additional risk mitigation measures be taken prior to heavy load lifts in that area.

The finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of design control and adversely affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors determined the finding could be evaluated using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," Table 4a, for the Mitigating Systems Cornerstone, dated January 10, 2008. The finding was determined to be of very low safety significance because the issue did not result in the actual loss of a safety function. This finding had a cross-cutting aspect in the area of problem identification and resolution, corrective action program component, because the staff did not take appropriate corrective actions to address safety issues in a timely manner, commensurate with their safety significance. Specifically, in 2008, when questions were raised by licensee staff regarding the adequacy of SLP-3, the SLP was not revised (P.1(d)).

Inspection Report# : [2009005](#) (pdf)

Significance:  Dec 31, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Momentary Loss Of Unit 2 Reactor Vessel Level Indication In The Control Room

A self-revealed finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for performing an Instrumentation and Control procedure that was inappropriate to the circumstances, and resulted in the momentary loss of all available channels of reactor vessel level indication in the control room. As part of the immediate corrective actions, the licensee suspended the performance of the procedure and sent an operator into containment to verify reactor vessel level via the local standpipe level indicator and to ensure level indication was reestablished. Additionally, the licensee applied a work planning logic-tie to this activity to ensure the reactor was de-fueled prior to performing this calibration and was currently evaluating the need for revisions to the procedure.

The finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of procedure quality and adversely affected the associated cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors assessed the significance of the finding in accordance with Inspection Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process," and determined that this issue required a Phase 2 analysis since the finding increased the likelihood of a loss of reactor coolant system inventory. The inspectors and a senior reactor analyst determined through the analysis that this issue is best characterized as a finding of very low safety significance. This finding had a cross-cutting aspect in the area of human performance, work control component, in that the licensee did not appropriately coordinate work activities for the existing plant conditions to ensure the operational impact on reactor vessel level indication while at a water level above reduced inventory was fully understood (H.3(b)).

Inspection Report# : [2009005](#) (pdf)

Significance:  Dec 18, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Errors Found in the Room Ventilation Calculation for G-01 and G-02

A finding of very low safety-significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control" was identified by the inspectors for the licensee's failure to adequately calculate the maximum room temperature for G-01 and G-02. Specifically, the licensee's calculation 2005-0054 failed to incorporate the design basis described in Technical Specification (TS) bases 3.8.1 related to the numbers of fire dampers associated with G-01 and G-02 exhaust fans that must be opened to maintain room temperature. The calculation also failed to demonstrate that the temperature stratification close to the combustion air intake filter was acceptable. Instead, the calculation only considered the bulk air temperature in the room. The licensee subsequently entered these concerns into their corrective action program as AR 01162599 and AR 01162759.

The finding was determined to be more than minor because the finding was similar to IMC 0612, Appendix E, Example (3.J). The calculation errors were significant in that there was reasonable doubt that the maximum room temperature would not exceed the value of the Vendor Technical manual. The finding impacted the Mitigating System cornerstone of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee did not ensure that the maximum room temperature of EDG-1 and EDG-2 would not exceed 115 degrees Fahrenheit (F), which is required to be maintained to ensure that the EDGs will perform their safety function during a design basis accident when the outside air temperature was 95 degrees Fahrenheit. The finding was of very low safety-significance based on a Phase 1 screening in accordance with IMC 0609, Appendix A, A Significance Determination of Reactor Inspection Findings for At-Power Situations." This finding was not associated with a cross-cutting aspect because the finding was not indicative of the licensee's current performance.

Inspection Report# : [2009007](#) (pdf)

Barrier Integrity

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Evaluate Seismic Piping Interactions

A finding of very low safety significance and an associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the licensee's failure to evaluate seismic piping interactions. Specifically, for a plant configuration where the stem of a spent fuel pool cooling system valve contacted an adjacent service water pipe, the licensee's evaluation to demonstrate that the existing spent fuel pool cooling system piping and valves met the design basis acceptance criteria of United States of America Standard (USAS) B31.1-1967 used a method of analysis that did not evaluate the dynamic effect of impact forces as specified by the design basis piping code. The licensee entered this issue into its corrective action program.

The finding was determined to be more than minor because it was associated with the Barrier Integrity Cornerstone attribute of design control and affected the cornerstone objective of providing reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, compliance with the seismic Category I design basis requirements of United States of America Standard (USAS) B31.1-1967 was to ensure valve SF-2, the valve connection between two sections of spent fuel pool cooling system piping, would function as required during a seismic Category I design basis event. The finding screened as having very low safety significance (Green) because it was a design deficiency of the structural integrity of the spent fuel pool

cooling piping system that: did not result in loss of cooling to the spent fuel pool; did not result from fuel handling errors that caused damage to fuel clad integrity or a dropped assembly; and did not result in loss of spent fuel pool inventory greater than 10 percent of spent fuel pool volume. The finding had no cross-cutting aspect because it was a legacy design issue, not reflective of current performance.
Inspection Report# : [2010002](#) (pdf)

Significance:  Dec 31, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure To Ensure Adequate Control Of Foreign Material In Safety-Related Systems

A self-revealed finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for the failure to ensure adequate control of foreign material in accordance with the requirements of procedure NP 8.4.10, "Exclusion of Foreign Material from Plant Components and Systems." Specifically, on October 17, 2009, foreign material was discovered inside the 2SI-897B valve after the valve failed to properly stroke during the performance of procedure IT 215, "SI [safety injection] Valves - Cold Shutdown." The licensee took prompt corrective actions to repair the valve and perform an extent-of-condition review. Additionally, upon entering the issue into its corrective action program, the licensee performed a causal evaluation to determine any additional corrective actions.

The finding was more than minor because it was associated with the Barrier Integrity Cornerstone attribute of human performance and adversely affected the associated cornerstone objective of providing reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, due to the interference caused by the foreign material inside the 2SI 897B valve, the valve would not have been able to perform its safety function to close during the initiation of the post LOCA (loss of coolant accident) sump-recirculation phase of safety injection. The inspectors determined the finding could be evaluated in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a, dated January 10, 2008. The finding was determined to be of very low safety significance because the issue did not represent a degradation of the radiological barrier function provided for the control room, the auxiliary building, or the spent fuel pool; represent a degradation of the barrier function of the control room against smoke or a toxic atmosphere; represent an actual open pathway in the physical integrity of reactor containment (valves, airlocks, containment isolation system (logic and instrumentation)), and heat removal components; or involve an actual reduction in function of hydrogen igniters in the reactor containment. No cross cutting aspect was identified because the foreign material was determined to have been introduced into the system in the past and was not considered indicative of current performance.

Inspection Report# : [2009005](#) (pdf)

Emergency Preparedness

Occupational Radiation Safety

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: FIN Finding

Inadequate Communications, Incomplete As-Low-As-Is-Reasonably-Achievable Job Planning And Ineffective Implementation Of Radiological Work Controls

The inspectors identified a finding of very low-safety-significance for inadequate as-low-as-is-reasonably achievable (ALARA) job planning and ineffective implementation of radiological work controls. This issue adversely impacted the licensee's ability to minimize dose for the containment sump fibrous insulation removal project during the Unit 2

Refueling Outage (U2R30). Specifically, radiological controls were not effectively implemented to reduce ambient radiation levels and minimize in-field work hours for craft personnel. This resulted in an actual dose outcome that was not consistent with the planned, intended dose for work associated with the fibrous insulation removal project. Corrective actions were implemented to address the organizational communication deficiencies that lead to the incomplete ALARA job planning and ineffective implementation of radiological work controls for the project.

The finding was more than minor because it impacted the Occupational Radiation Safety Cornerstone objective for ensuring adequate protection of worker health and safety from exposure to radiation in the attribute of program and process for ALARA planning, in that, incomplete ALARA job planning and radiological work control deficiencies contributed to an actual increase in worker doses in excess of 5 person-rem and exceeded the licensee's initial intended dose estimates by more than 50 percent. The finding did not involve: an overexposure; a substantial potential for an overexposure; or an impaired ability to assess dose. While the finding involved ALARA planning and controls, the 3-year rolling average dose for the Point Beach Nuclear Plant was less than the significance determination process threshold of 135-person-rem for pressurized water reactors at the time the performance deficiency occurred. Therefore, the inspectors determined that this is a finding of very low safety significance. The finding had a cross-cutting aspect in the area of human performance in decision-making, in that, the licensee did not communicate decisions and the basis for decisions to personnel who have a need to know the information in order to perform work safely in a timely manner (H.1(c)).

Inspection Report# : [2010002](#) (*pdf*)

Public Radiation Safety

Significance:  Dec 31, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure To Maintain Proper Control Of Radioactive Material Within The Radiologically Controlled Area

A self-revealed finding of very low safety significance and associated Non-Cited Violation of 10 CFR 20.1101(b) was identified for the failure to adequately control radioactive material to prevent its migration outside the radiologically controlled area (RCA), as required by licensee procedures. On May 21, 2009, a contract worker performing inspections of the main electrical transformers located outside the RCA picked-up a wadded-ball of debris (unmarked tape) and placed it in his front pants pocket. The debris was later found to be radioactively contaminated when the worker alarmed the protected area exit radiation monitors a few hours later as he attempted to leave the site. The tape was likely used to cover contaminated hoses that were previously used within the Point Beach RCA, but had escaped the licensee's control and migrated (blew) into the transformer area outdoors where it was found by the worker. The licensee's storage of radioactive material in an outdoor satellite RCA and/or the licensee's radioactive material control practices during refueling outages when the containment building equipment hatch was open to the environment led to the escape of the material outside the RCA. The contractor's assigned work duties should not have involved exposure to radioactive material; consequently, the worker was unnecessarily exposed to radiation from the contaminated tape. A dose evaluation completed by the licensee's consultant determined that the effective dose equivalent to the worker's thigh from exposure to the contaminated ball of tape was approximately one mrem. The licensee's corrective action called for expanded radiation protection oversight during movement of material in outdoor areas. Procedures were revised to include a post outage walkdown of outdoor areas near the RCA yard. Additionally, the licensee planned to construct an enclosure so that storage/transfer of contaminated materials could be performed indoors.

The finding was more than minor because it impacted the program and process attribute of the Public Radiation Safety Cornerstone and adversely affected the cornerstone objective of ensuring adequate protection of public health and safety from exposure to radiation, in that, unnecessary radiation exposure was received by an individual from inadequately controlled radioactive material. The finding was determined to be of very low safety significance because: (1) it involved a radioactive material control problem that was contrary to NRC requirements and the licensee's procedure; and (2) the dose impact to a member of the public (the contract worker) within the licensee's

restricted area was less than 5 millirem total effective dose equivalent. The cause of the radioactive material control problem involved a cross-cutting component in the human performance area for inadequate work control, in that, job site conditions including environmental conditions (high winds, night time work, etc.) impacted human performance and consequently, radiological safety, during movement of material/equipment in outdoor areas (H.3.(a)).

Inspection Report# : [2009005](#) (*pdf*)

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : November 29, 2010

Point Beach 2

4Q/2010 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO FOLLOW PROCEDURES NEEDED TO MAINTAIN EQUIPMENT OPERABILITY WITH HAZARD BARRIERS OUT-OF-SERVICE.

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions Procedures, and Drawings," was identified by the inspectors for the licensee's failure to follow procedural/instructional guidance contained in a temporary procedure for the maintenance of high energy line break (HELB) barriers. Specifically, on June 25, 2010, the licensee placed a wedge under the control room door, a HELB barrier, contrary to the guidance contained in Operations Notebook procedure/instruction, "HELB Barrier/Vent Path Temporary Guidance." The licensee entered this item into its corrective action program.

This performance deficiency was more than minor because it was associated with the Initiating Events Cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring the availability and reliability of equipment needed to limit the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. Specifically, the failure to maintain the control room door available as a supporting structure, system, or component (SSC) for control room equipment availability/operability during a HELB impacted the reliability and the operability of affected control room SSCs. The finding screened as having very low safety significance (Green) because of its short exposure, approximately 0.5 hours. The finding had a cross cutting aspect in the area of human performance, work practices, because the licensee's staff was familiar with and had been briefed on, "HELB Barrier/Vent Path Temporary Guidance" in the Operations Notebook yet had failed to implement human error prevention techniques such as pre job briefing or peer checking, which, if performed, could have ensured that maintenance on the control room door was performed as required by the operations notebook procedure (H.4(a)).

Inspection Report# : [2010003](#) (*pdf*)

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Untimely Corrective Actions To Address Longstanding Issue Of Submerged Cables

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified by the inspectors for the licensee's failure to implement timely corrective actions to address the longstanding issue of submerged, medium voltage, underground cables at Point Beach. Specifically, this issue was first identified in 1997, with numerous condition reports written since that time, and in January 2008, it was associated with a significant condition adverse to quality. The licensee entered this issue into its corrective action program. Corrective actions completed include increased monitoring and pumping of manholes; proposed actions include design changes to support automatic monitoring and/or water removal from the manholes.

The finding was more than minor because it was associated with the Initiating Events Cornerstone attribute of protection against external factors and affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenged critical safety functions during shutdown as well as power operations. Specifically, the failure to correct the submerged cable issue in a timely manner; if left uncorrected, would lead to other cable failures as a result of the continued cable degradation. The finding screened as having very low safety significance (Green) because it did not contribute to both the likelihood of a reactor trip and the likelihood that

mitigation equipment or functions would not be available. The finding had a cross-cutting aspect in the area of human performance, resources, because the licensee did not appropriately maintain long-term plant safety by maintenance of design margins, minimization of longstanding equipment issues, minimizing preventive maintenance deferrals, and ensuring maintenance and engineering backlogs were managed low enough to support safety (H.2(a)).
Inspection Report# : [2010002](#) (*pdf*)

Mitigating Systems

Significance:  Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Safety System Venting Procedure Void Assessment Requirements

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to establish adequate instructions or appropriate acceptance criteria to ensure that voids vented from safety related piping were evaluated for their effects on system operability. The licensee entered the issue into its corrective action program, performed a condition evaluation, and took actions to revise the deficient procedure.

The issue was more than minor because the lack of procedural controls for void monitoring and assessment resulted in a condition where there was reasonable doubt that the past operability of the system was properly assessed, and that these observations, if left uncorrected, could lead to a condition where an inoperable system or gas intrusion mechanisms would not be identified or corrected. The finding was of very low safety significance, because the inspectors answered "no" to all of the questions in the Mitigating Systems Cornerstone column of the Significance Determination Process worksheet. The inspectors determined that the finding has a cross cutting aspect in the area of human performance, decision making, because the interdisciplinary nature of the observations reflected a lack of a systematic process during the development and execution of the related procedure (H.1(a)).

Inspection Report# : [2010005](#) (*pdf*)

Significance:  Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Ultrasonic Assessment of Safety System Voids as Required by Procedure

A finding of very low safety significance and associated non cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to perform ultrasonic testing on safety related systems for void assessment as required by the licensee's gas accumulation management program. The licensee entered the issue into its corrective action program and has begun the required ultrasonic testing.

The issue was more than minor because the lack of procedural controls for void monitoring and assessment resulted in a condition where there was reasonable doubt that the past operability of the system was properly assessed, and that these observations, if left uncorrected, could lead to a condition where an inoperable system or gas intrusion mechanisms would not be identified or corrected. The issue was determined to be of very low safety significance because the inspectors answered "no" to all of the questions in the Mitigating Systems Cornerstone column of the Significance Determination Process worksheet. The inspectors determined that the finding has a cross cutting aspect in the area of human performance, work practices, because the licensee failed to provide sufficient oversight to ensure that the procedure was followed (H.4(c)).

Inspection Report# : [2010005](#) (*pdf*)

Significance:  Dec 31, 2010

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Multiple ESFAS Steam Line Pressure Channel Modules Inoperable Due to Inadequate Calibration

Instructions

A finding of very low safety significance and associated non cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the failure to have adequate maintenance procedures for calibrating the engineered safety features actuation system steam line pressure dynamic compensation modules. Specifically, since the basis calculation for determining the settings of the lead/lag values for the modules did not address dynamic settings, and the proceduralized tolerances were too restrictive, the calibration instructions were inadequate to ensure the modules' ability to perform in accordance with technical specification requirements. Upon discovery, the licensee entered the issue into its corrective action program and performed an apparent cause evaluation that documented a number of planned program and procedural enhancements.

The finding was more than minor because it is associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low safety significance because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the technical specification allowed outage time, and no risk due to external events. The finding does not have a cross cutting aspect because the performance deficiency occurred outside of the 3-year window considered to be representative of present performance.

Inspection Report# : [2010005](#) (*pdf*)

Significance: SL-IV Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Document a 10 CFR 50.59 Evaluation For Changes Made to Procedure OI-38, Circulating Water System Operation

A Severity Level IV non cited violation of 10 CFR 50.59(d)(1), "Changes, Tests, and Experiments," was identified by the inspectors for the failure to document an evaluation that provided a basis for the determination that the changes made to procedure OI 38, "Circulating Water System Operation," did not require a license amendment. Specifically, the licensee failed to provide an evaluation that adequately documented that differences between the procedure changes modifying the operational configuration of the condenser steam dump system and operational considerations and design assumptions outlined within the final safety analysis report and the basis of technical specifications were acceptable. As part of its corrective action, the licensee revised the procedure to remove the original change to the operational configuration of the steam dump system.

The violation was determined to be more than minor because the inspectors could not reasonably determine that the changes would not have ultimately required prior NRC approval. Violations of 10 CFR 50.59 are dispositioned using the traditional enforcement process instead of the Reactor Oversight Process Significance Determination Process (SDP) because they are considered to be violations that could potentially impede or impact the regulatory process. The underlying technical issue was evaluated under the SDP to determine the significance of the violation with respect to core damage probability. The issue screened as having very low safety significance because the inspectors answered "no" to all of the questions in the SDP worksheet. The finding has a cross cutting aspect in the corrective action program element of problem identification and resolution because the licensee failed to thoroughly evaluate questions regarding differences between the plant operational configuration and assumptions in the current licensing basis when they did not complete a prompt operability evaluation to assess noted operational disparities (P.1(c)).

Inspection Report# : [2010005](#) (*pdf*)

Significance:  Dec 31, 2010

Identified By: NRC

Item Type: FIN Finding

Failure to Document a 10 CFR 50.59 Evaluation For Changes Made to Procedure OI-38, Circulating Water System Operation

A Severity Level IV non cited violation of 10 CFR 50.59(d)(1), "Changes, Tests, and Experiments," was identified by the inspectors for the failure to document an evaluation that provided a basis for the determination that the changes made to procedure OI 38, "Circulating Water System Operation," did not require a license amendment. Specifically, the licensee failed to provide an evaluation that adequately documented that differences between the procedure

changes modifying the operational configuration of the condenser steam dump system and operational considerations and design assumptions outlined within the final safety analysis report and the basis of technical specifications were acceptable. As part of its corrective action, the licensee revised the procedure to remove the original change to the operational configuration of the steam dump system.

The violation was determined to be more than minor because the inspectors could not reasonably determine that the changes would not have ultimately required prior NRC approval. Violations of 10 CFR 50.59 are dispositioned using the traditional enforcement process instead of the Reactor Oversight Process Significance Determination Process (SDP) because they are considered to be violations that could potentially impede or impact the regulatory process. The underlying technical issue was evaluated under the SDP to determine the significance of the violation with respect to core damage probability. The issue screened as having very low safety significance because the inspectors answered “no” to all of the questions in the SDP worksheet. The finding has a cross cutting aspect in the corrective action program element of problem identification and resolution because the licensee failed to thoroughly evaluate questions regarding differences between the plant operational configuration and assumptions in the current licensing basis when they did not complete a prompt operability evaluation to assess noted operational disparities (P.1(c)).

The Traditional Enforcement item associated with this item is tracked as NCV 2010005-06.

Inspection Report# : [2010005](#) (*pdf*)

Significance:  Sep 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Identify Hydrogen Fire Hazards on Pre-Fire Plan

A finding of very low safety significance and associated non-cited violations of a license condition was identified by the inspectors for the failure to identify hydrogen fire hazards on a pre fire plan. Specifically, the licensee failed to identify that a compressed gas cylinder in the Unit 1 sample room contained hydrogen and that the Volume Control Tank valve galleries contained hydrogen piping. The licensee entered this issue into their corrective action program and revised the pre fire plan to reflect the identified hydrogen fire hazards.

The finding was determined to be more than minor because failure to identify hydrogen fire hazards in the pre fire plan could impact the fire brigade’s ability to effectively fight a fire due to the unique hazards associated with hydrogen. The inspectors determined that the finding was of very low safety significance because the fire brigade consisted of plant operators familiar with the 46-foot elevation of the auxiliary building and associated hazards. This finding was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). No cross cutting aspects associated with this finding were identified. (Section 1R05)

Inspection Report# : [2010004](#) (*pdf*)

Significance:  Sep 30, 2010

Identified By: NRC

Item Type: FIN Finding

Inadequate Acceptance Criteria for Fire Door Surveillance Procedure

A finding of very low safety significance was identified by the inspectors for the failure to provide appropriate acceptance criteria for the fire door surveillance procedure. Specifically, the acceptance criteria for fire door functionality did not specify that doors, when opened, returned to the closed and latched position. The licensee entered this issue into their corrective action program and planned to revise the surveillance procedure.

The finding was determined to be more than minor because if left uncorrected, the failure to have appropriate acceptance criteria would become a more significant safety concern. Specifically, the lack of appropriate fire door functionality acceptance criteria could result in a nonfunctional door closing mechanism and a degraded fire barrier not being detected during surveillance activities. The inspectors determined that the finding was of very low safety significance because the inspectors did not identify any instances where a fire door was left open or unlatched, or an instance where a fire door which would not close on its own and was not monitored for closure. Consequently, the inspectors determined that the finding represented a low degradation and, as such, this finding screened as Green.

This finding was associated with the Mitigating Systems cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e. core damage). This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee's failure to follow procedures, such as the procedure writers' guide, resulted in the failure to provide appropriate acceptance criteria for the fire door surveillance procedure (H.4(b)).

Inspection Report# : [2010004](#) (*pdf*)

Significance:  Sep 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Ensure That RHR Would Be Capable to Respond to a Loss of Cooling Accident at Mode 4

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance for the failure to ensure that residual heat removal (RHR) system would be capable to respond to a loss of coolant accident that initiates in Mode 4. Specifically, the residual heat removal system could experience flash evaporation during a loss of coolant accident at this Mode resulting in steam binding of the system pumps and/or an adverse waterhammer. The licensee entered this issue into the corrective action program and will make procedure changes to ensure the operability of at least one RHR train while in Mode 4.

The performance deficiency was determined to be more than minor because it was associated with the mitigating system cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the capability of systems that respond to initiating events to prevent undesirable consequences. The finding screened as very low safety significance because a Phase II evaluation determined that it represented a change in core damage frequency of less than 5 E-9. The inspectors determined that this finding did not have a cross-cutting aspect.

Inspection Report# : [2010004](#) (*pdf*)

Significance:  Jun 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Enter Abnormal Operating Procedure During Tornado Warning

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to implement a required abnormal operating procedure (AOP) during a period of impending severe weather. Specifically, the licensee failed to enter AOP 13C, "Severe Weather Conditions," during a tornado warning issued by the National Weather Service for the specific location of the plant. The licensee immediately entered the issue into its corrective action program and conducted an apparent cause evaluation of the conditions.

This performance deficiency was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of protection against external events and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding was determined to be of very low safety significance (Green) because it did not involve the loss or degradation of equipment or function specifically designed to mitigate a seismic, flooding, or severe weather initiating event (e.g., seismic snubbers, flooding barriers, tornado doors), and did not involve the total loss of any safety function. This finding has a cross cutting aspect in the area of human performance, resources, because the licensee did not ensure that personnel, equipment, procedures, and other resources were available and adequate to assure nuclear safety. Specifically, the entry conditions in AOP 13C were out of date and failed to provide an adequate nexus between the purpose and instructions of the procedure (H.2(c)).

Inspection Report# : [2010003](#) (*pdf*)

Significance:  Jun 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Control the Design of Partially Installed Modifications for Seismic Requirements

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B,

Criterion III, "Design Control," was identified by the inspectors for the failure of the licensee's modification process to ensure that new 480 volt cables, installed for the future repowering of various auxiliary feedwater (AFW) system motor operated valves, were installed in accordance with applicable regulatory requirements. Specifically, a seismic design evaluation was not completed prior to the installation of a cable coil suspended above the 2MS 2020 valve, 2P 29 turbine driven AFW pump steam supply. In response to this issue, the licensee installed more robust restraints that satisfied seismic acceptability criteria and performed an evaluation that showed the interim condition of the modification did not challenge operability. At the conclusion of this inspection period, the licensee was in the process of conducting a root cause evaluation. The inspectors also noted that a very similar issue at this site resulted in the issuance of a NCV in the second quarter of 2009.

This performance deficiency was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of design control and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, once identified, the modification required rework to comply with applicable design requirements. The inspectors determined the finding was of very low safety significance (Green) because the issue did not result in the actual loss of a safety function. The inspectors also determined the finding has a cross cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to implement appropriate corrective actions for a previous violation with the same performance deficiency (P.1(d)).

Inspection Report# : [2010003](#) (*pdf*)

Significance:  Jun 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

PROCEDURES WERE NOT APPROPRIATE TO ADEQUATELY VERIFY AND DOCUMENT THE DESIGN OF NEW OR MODIFIED SSCs WITH RESPECT TO SEISMIC II/I INTERACTIONS.

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the failure to provide procedures that were appropriate to verify and document the design of new or modified SSCs with respect to seismic II/I interactions. Specifically, the procedures used for seismic II/I interaction evaluations of new or modified SSCs did not provide guidance for evaluating equipment that was not represented in the earthquake experience or generic testing equipment classes under the scope of the Seismic Qualification Utility Group methodology. Also, no formal guidance was incorporated in modification and seismic procedures to document seismic II/I interaction evaluations. As a result, the licensee did not perform an evaluation that was in accordance with the licensing basis to verify the design of the "B" containment sump strainers of Units 1 and 2 with respect to potential seismic II/I interactions. The licensee entered this issue into its corrective action program.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of protection against external events and adversely affected the cornerstone objective of ensuring the capability of systems that respond to initiating events to prevent undesirable consequences. This finding was of very low safety significance (Green) because it was a qualification deficiency confirmed not to result in loss of operability or functionality. The inspectors determined that the finding had a cross cutting aspect in the area of problem identification and resolution, self and independent assessments, because the licensee did not conduct self assessments of the Seismic Qualification Utility Group program (P.3(a)).

Inspection Report# : [2010003](#) (*pdf*)

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Inappropriate Application Of A Dedicated Operator During A System Venting Surveillance

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR 50.65(a)(4) was identified by the inspectors for the failure to properly assess risk that resulted from risk-significant maintenance being performed on the residual heat removal, safety injection, and containment spray systems. Specifically, the licensee inappropriately applied criteria for the use of a dedicated operator to meet availability requirements. As part of its corrective actions, the licensee stopped work that required

the use of a dedicated operator pending further evaluation.

The issue was more than minor because the licensee's risk assessment for January 12, 2010, failed to consider multiple systems unavailable during maintenance. Specifically, the failure to account for the unavailability of the residual heat removal, safety injection, and containment spray systems, resulted in an inadequate daily risk assessment and could affect the unavailability time of this system in related performance and maintenance rule indicators. The inspectors evaluated the finding using the Significance Determination Process in accordance with Inspection Manual Chapter 0609, "Significance Determination Process," Attachment K, Maintenance Risk Assessment and Risk Management Significance Determination Process, dated May 19, 2005, and determined the issue screened as having very low safety significance, because the incremental conditional core damage probability was less than 1E-6 due to the test condition lasting only four hours. This finding had a cross-cutting aspect in human performance, decision-making, because the licensee did not have a process or use a systematic approach regarding facets of a dedicated operator (H.1(a)).

Inspection Report# : [2010002](#) (*pdf*)

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Follow Temporary Modification Procedure

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to follow the temporary modifications procedure FP-E-MOD-03, Revision 6. Specifically, the Applicability section of this procedure was not properly applied to the temporary condensate storage tank (CST) modification such that the system was not appropriately characterized as a temporary modification. As a result, the licensee failed to adequately document an evaluation of the potential impacts to operating equipment. As of the conclusion of the inspection, the licensee had entered this issue into its corrective action program.

The finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of design control and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the licensee inappropriately applied the exemption criteria of the temporary modification procedure to the fill point connected to the newly classified "vent" of the permanent CST and failed to assess the impact of the temporary CST system on plant design. The finding screened as having very low safety significance (Green) because the finding was not a design or qualification deficiency resulting in a loss of functionality, did not represent a loss of system safety function or loss of a single train for greater than its allowed technical specification time, and did not screen as potentially risk significant due to seismic, flooding, or severe weather initiating events. This finding had a cross-cutting aspect in the area of human performance, decision-making, because the licensee did not appropriately use conservative assumptions in decision-making and verify the validity of underlying assumptions for the temporary CST modification (H.1(b)).

Inspection Report# : [2010002](#) (*pdf*)

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Establish Required Fire Watches

A finding of very low safety significance and associated Non-Cited Violation of Technical Specification 5.4.1.h for Units 1 and 2 was identified by the inspectors for the

licensee's failure to establish appropriate fire watches required as compensatory

3 Enclosure

measures to address identified fire protection impairments. Specifically, on three occasions, the licensee failed to issue, and properly implement, fire watch surveillances as required by procedure OM 3.27. The licensee had entered all instances into its corrective action program.

The finding was more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of protection against external factors (fire) and affected the cornerstone objective of ensuring the availability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to implement fire watches required as compensatory measures degraded the defense-in-depth elements of the fire protection program that is necessary to ensure safe shutdown in the event of a fire. The issue was of very low safety significance based on the low degradation rating for the finding. The finding had a cross-cutting aspect in the area of human performance, resources, because the licensee's preliminary apparent cause evaluation attributed the underlying cause of these events to less than adequate procedures, or procedures that did not adequately link to each other, and pre-job briefing materials that did not address fire protection considerations (H.2(c)).

Inspection Report# : [2010002](#) (pdf)

Significance: SL-IV Feb 17, 2010

Identified By: NRC

Item Type: VIO Violation

Inaccurate Information Relating to Signatures on Ignition Control Procedures

A Severity Level IV, Cited Violation of 10 CFR 50.9(a) "Completeness and Accuracy of Information," was identified by the inspectors for the licensee's failure to maintain complete and accurate information required by the Commission. Specifically, a Point Beach Nuclear Plant employee and two contract employees from Day and Zimmermann Nuclear Power Services, signed Ignition Control Permits without the authorized person inspecting the areas as required by the ignition control procedure NP 1.9.13.

The violation affected the NRC's ability to perform its regulatory function because it involved willfulness. Therefore, it was evaluated using Traditional Enforcement. The NRC determined that a Severity Level IV violation was appropriate due to the willful nature of some violation examples. The NRC determined that the violation should be cited because: (1) the violation was NRC-identified; and (2) it was willful; and (3) it involved a first-line supervisor. The inspectors determined that this violation was a performance deficiency, but because the underlying work was always completed with a fire watch present, that deficiency was minor in nature. As such, no cross-cutting aspect was evaluated for the minor performance deficiency.

Inspection Report# : [2010008](#) (pdf)

Inspection Report# : [2010010](#) (pdf)

Barrier Integrity

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Evaluate Seismic Piping Interactions

A finding of very low safety significance and an associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the licensee's failure to evaluate seismic piping interactions. Specifically, for a plant configuration where the stem of a spent fuel pool cooling system valve contacted an adjacent service water pipe, the licensee's evaluation to demonstrate that the existing spent fuel pool cooling system piping and valves met the design basis

acceptance criteria of United States of America Standard (USAS) B31.1-1967 used a method of analysis that did not evaluate the dynamic effect of impact forces as specified by the design basis piping code. The licensee entered this issue into its corrective action program.

The finding was determined to be more than minor because it was associated with the Barrier Integrity Cornerstone attribute of design control and affected the cornerstone objective of providing reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, compliance with the seismic Category I design basis requirements of United States of America Standard (USAS) B31.1-1967 was to ensure valve SF-2, the valve connection between two sections of spent fuel pool cooling system piping, would function as required during a seismic Category I design basis event. The finding screened as having very low safety significance (Green) because it was a design deficiency of the structural integrity of the spent fuel pool cooling piping system that: did not result in loss of cooling to the spent fuel pool; did not result from fuel handling errors that caused damage to fuel clad integrity or a dropped assembly; and did not result in loss of spent fuel pool inventory greater than 10 percent of spent fuel pool volume. The finding had no cross-cutting aspect because it was a legacy design issue, not reflective of current performance.
Inspection Report# : [2010002](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Significance:  Mar 31, 2010

Identified By: NRC

Item Type: FIN Finding

Inadequate Communications, Incomplete As-Low-As-Is-Reasonably-Achievable Job Planning And Ineffective Implementation Of Radiological Work Controls

The inspectors identified a finding of very low-safety-significance for inadequate as-low-as-is-reasonably achievable (ALARA) job planning and ineffective implementation of radiological work controls. This issue adversely impacted the licensee's ability to minimize dose for the containment sump fibrous insulation removal project during the Unit 2 Refueling Outage (U2R30). Specifically, radiological controls were not effectively implemented to reduce ambient radiation levels and minimize in-field work hours for craft personnel. This resulted in an actual dose outcome that was not consistent with the planned, intended dose for work associated with the fibrous insulation removal project. Corrective actions were implemented to address the organizational communication deficiencies that lead to the incomplete ALARA job planning and ineffective implementation of radiological work controls for the project.

The finding was more than minor because it impacted the Occupational Radiation Safety Cornerstone objective for ensuring adequate protection of worker health and safety from exposure to radiation in the attribute of program and process for ALARA planning, in that, incomplete ALARA job planning and radiological work control deficiencies contributed to an actual increase in worker doses in excess of 5 person-rem and exceeded the licensee's initial intended dose estimates by more than 50 percent. The finding did not involve: an overexposure; a substantial potential for an overexposure; or an impaired ability to assess dose. While the finding involved ALARA planning and controls, the 3-year rolling average dose for the Point Beach Nuclear Plant was less than the significance determination process threshold of 135-person-rem for pressurized water reactors at the time the performance deficiency occurred. Therefore, the inspectors determined that this is a finding of very low safety

significance. The finding had a cross-cutting aspect in the area of human performance in decision-making, in that, the licensee did not communicate decisions and the basis for decisions to personnel who have a need to know the information in order to perform work safely in a timely manner (H.1(c)).

Inspection Report# : [2010002](#) (*pdf*)

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: SL-IV Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Submit Licensee Event Report per 10 CFR 50.73(a)(2)(v)(A) and (D).

A Severity Level IV non cited violation of 10 CFR Part 50.73(a)(2)(v)(A) and (D) was identified by the inspectors for the failure of the licensee to report an event or condition that could have prevented the fulfillment of the auxiliary feedwater and safety injection safety functions, which are relied upon to shutdown the reactor and maintain it in a shutdown condition, and mitigate the consequences of an accident. Specifically, the licensee had not properly controlled the blocking open of doors that served as high energy line break barriers. The licensee entered the violation into its corrective action program as condition report 01616620 and revise the procedure on control of high energy line break barriers.

Violations of 10 CFR 50.73 are considered to be violations that potentially impact the regulatory process and are dispositioned using the traditional enforcement process instead of the Reactor Oversight Process Significance Determination Process. A cross-cutting aspect was not assigned to this violation.

Inspection Report# : [2010005](#) (*pdf*)

Last modified : March 03, 2011

Point Beach 2

1Q/2011 Plant Inspection Findings

Initiating Events

Significance:  Mar 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform Required Ultrasonic Exam In Accordance With Procedures

On March 3, 2010, the inspectors identified a finding of very low safety significance and a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for a vendor examiner's failure to follow procedure instructions and perform required circumferential ultrasonic scans of two elbow-to-pipe containment spray line welds. The licensee subsequently performed the scans with no relevant indications detected and documented the failure to perform the scans in the corrective action system.

The finding was determined to be more than minor because, if left uncorrected, the failure to perform the weld examinations could become a more significant safety concern. Absent NRC identification, the licensee would not have performed the full required exam of the weld for an indefinite period of service which would have placed the reactor coolant pressure boundary at increased risk for undetected cracking, leakage, or component failure. This finding was of very low safety significance based on the inspectors answering "No" to the Phase 1 screening question identified in the Containment Barrier column of Table 4a in Attachment 0609.04, "Phase 1 Initial Screening and Characterization of Findings," dated January 10, 2008, of Inspection Manual Chapter 0609, "Significance Determination Process." This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to effectively communicate expectations regarding procedural compliance. Specifically, the failure to perform required circumferential examinations occurred because the licensee's management staff did not adequately stress or enforce procedure adherence for this activity. In particular, procedure NDE-173 was issued as an "Informational Use" type procedure that allowed licensee staff to rely on memory to perform the procedural steps.

Inspection Report# : [2011002](#) (*pdf*)

Significance:  Jun 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO FOLLOW PROCEDURES NEEDED TO MAINTAIN EQUIPMENT OPERABILITY WITH HAZARD BARRIERS OUT-OF-SERVICE.

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions Procedures, and Drawings," was identified by the inspectors for the licensee's failure to follow procedural/instructional guidance contained in a temporary procedure for the maintenance of high energy line break (HELB) barriers. Specifically, on June 25, 2010, the licensee placed a wedge under the control room door, a HELB barrier, contrary to the guidance contained in Operations Notebook procedure/instruction, "HELB Barrier/Vent Path Temporary Guidance." The licensee entered this item into its corrective action program.

This performance deficiency was more than minor because it was associated with the Initiating Events Cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring the availability and reliability of equipment needed to limit the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. Specifically, the failure to maintain the control room door available as a supporting structure, system, or component (SSC) for control room equipment availability/operability during a HELB impacted the reliability and the operability of affected control room SSCs. The finding screened as having very low safety significance (Green) because of its short exposure, approximately 0.5 hours. The finding had a cross cutting aspect in the area of human performance, work practices, because the licensee's staff was familiar with and had been briefed on , "HELB Barrier/Vent Path Temporary Guidance" in the Operations Notebook yet had failed to implement human error prevention techniques such as pre job briefing or peer checking, which, if performed, could have ensured that maintenance on the control room door was performed as required by the operations notebook procedure (H.4(a)).

Inspection Report# : [2010003](#) (*pdf*)

Mitigating Systems

Significance:  Mar 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Maintain Internal Flood Protection Features On Emergency Diesel Generators G 01 And G 02 Control Cabinets

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the failure of the licensee from 1995 through January 20, 2011, to correctly translate the applicable regulatory requirements and the design basis into specifications, procedures, and instructions. Specifically, the licensee modified the control cabinets of emergency diesel generators G-01 and G-02 in 1995 without the appropriate internal flood protection design features. The licensee initiated condition report AR01610979, took immediate corrective actions to correct the deficient conditions, and performed an apparent cause evaluation. At the end of the inspection period, the licensee continued to implement planned corrective actions that included establishment of preventive maintenance activities to perform flooding seal inspections and extent of condition evaluations to ensure all potential design and licensing basis flooding issues were identified and resolved.

The finding was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of design control and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee failed to ensure that internal flood protection features used to mitigate a design basis accident were maintained. The inspectors determined the finding was of very low safety significance because it was a design or qualification deficiency confirmed not to result in a loss of operability or functionality. The inspectors determined that this finding did not reflect current performance since the error was introduced in a design change that was greater than three years old; therefore, there was no cross-cutting aspect associated with this finding.

Inspection Report# : [2011002](#) (*pdf*)

Significance:  Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Safety System Venting Procedure Void Assessment Requirements

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to establish adequate instructions or appropriate acceptance criteria to ensure that voids vented from safety related piping were evaluated for their effects on system operability. The licensee entered the issue into its corrective action program, performed a condition evaluation, and took actions to revise the deficient procedure.

The issue was more than minor because the lack of procedural controls for void monitoring and assessment resulted in a condition where there was reasonable doubt that the past operability of the system was properly assessed, and that these observations, if left uncorrected, could lead to a condition where an inoperable system or gas intrusion mechanisms would not be identified or corrected. The finding was of very low safety significance, because the inspectors answered "no" to all of the questions in the Mitigating Systems Cornerstone column of the Significance Determination Process worksheet. The inspectors determined that the finding has a cross cutting aspect in the area of human performance, decision making, because the interdisciplinary nature of the observations reflected a lack of a systematic process during the development and execution of the related procedure (H.1(a)).

Inspection Report# : [2010005](#) (*pdf*)

Significance:  Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Ultrasonic Assessment of Safety System Voids as Required by Procedure

A finding of very low safety significance and associated non cited violation of 10 CFR Part 50, Appendix B, Criterion

V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to perform ultrasonic testing on safety related systems for void assessment as required by the licensee's gas accumulation management program. The licensee entered the issue into its corrective action program and has begun the required ultrasonic testing.

The issue was more than minor because the lack of procedural controls for void monitoring and assessment resulted in a condition where there was reasonable doubt that the past operability of the system was properly assessed, and that these observations, if left uncorrected, could lead to a condition where an inoperable system or gas intrusion mechanisms would not be identified or corrected. The issue was determined to be of very low safety significance because the inspectors answered "no" to all of the questions in the Mitigating Systems Cornerstone column of the Significance Determination Process worksheet. The inspectors determined that the finding has a cross cutting aspect in the area of human performance, work practices, because the licensee failed to provide sufficient oversight to ensure that the procedure was followed (H.4(c)).

Inspection Report# : [2010005](#) (*pdf*)

Significance:  Dec 31, 2010

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Multiple ESFAS Steam Line Pressure Channel Modules Inoperable Due to Inadequate Calibration

Instructions

A finding of very low safety significance and associated non cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the failure to have adequate maintenance procedures for calibrating the engineered safety features actuation system steam line pressure dynamic compensation modules. Specifically, since the basis calculation for determining the settings of the lead/lag values for the modules did not address dynamic settings, and the proceduralized tolerances were too restrictive, the calibration instructions were inadequate to ensure the modules' ability to perform in accordance with technical specification requirements. Upon discovery, the licensee entered the issue into its corrective action program and performed an apparent cause evaluation that documented a number of planned program and procedural enhancements.

The finding was more than minor because it is associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low safety significance because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the technical specification allowed outage time, and no risk due to external events. The finding does not have a cross cutting aspect because the performance deficiency occurred outside of the 3-year window considered to be representative of present performance.

Inspection Report# : [2010005](#) (*pdf*)

Significance: SL-IV Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Document a 10 CFR 50.59 Evaluation For Changes Made to Procedure OI-38, Circulating Water System Operation

A Severity Level IV non cited violation of 10 CFR 50.59(d)(1), "Changes, Tests, and Experiments," was identified by the inspectors for the failure to document an evaluation that provided a basis for the determination that the changes made to procedure OI 38, "Circulating Water System Operation," did not require a license amendment. Specifically, the licensee failed to provide an evaluation that adequately documented that differences between the procedure changes modifying the operational configuration of the condenser steam dump system and operational considerations and design assumptions outlined within the final safety analysis report and the basis of technical specifications were acceptable. As part of its corrective action, the licensee revised the procedure to remove the original change to the operational configuration of the steam dump system.

The violation was determined to be more than minor because the inspectors could not reasonably determine that the changes would not have ultimately required prior NRC approval. Violations of 10 CFR 50.59 are dispositioned using the traditional enforcement process instead of the Reactor Oversight Process Significance Determination Process (SDP) because they are considered to be violations that could potentially impede or impact the regulatory process. The

underlying technical issue was evaluated under the SDP to determine the significance of the violation with respect to core damage probability. The issue screened as having very low safety significance because the inspectors answered “no” to all of the questions in the SDP worksheet. The finding has a cross cutting aspect in the corrective action program element of problem identification and resolution because the licensee failed to thoroughly evaluate questions regarding differences between the plant operational configuration and assumptions in the current licensing basis when they did not complete a prompt operability evaluation to assess noted operational disparities (P.1(c)).

Inspection Report# : [2010005](#) (pdf)

Significance:  Dec 31, 2010

Identified By: NRC

Item Type: FIN Finding

Failure to Document a 10 CFR 50.59 Evaluation For Changes Made to Procedure OI-38, Circulating Water System Operation

A Severity Level IV non cited violation of 10 CFR 50.59(d)(1), “Changes, Tests, and Experiments,” was identified by the inspectors for the failure to document an evaluation that provided a basis for the determination that the changes made to procedure OI 38, “Circulating Water System Operation,” did not require a license amendment. Specifically, the licensee failed to provide an evaluation that adequately documented that differences between the procedure changes modifying the operational configuration of the condenser steam dump system and operational considerations and design assumptions outlined within the final safety analysis report and the basis of technical specifications were acceptable. As part of its corrective action, the licensee revised the procedure to remove the original change to the operational configuration of the steam dump system.

The violation was determined to be more than minor because the inspectors could not reasonably determine that the changes would not have ultimately required prior NRC approval. Violations of 10 CFR 50.59 are dispositioned using the traditional enforcement process instead of the Reactor Oversight Process Significance Determination Process (SDP) because they are considered to be violations that could potentially impede or impact the regulatory process. The underlying technical issue was evaluated under the SDP to determine the significance of the violation with respect to core damage probability. The issue screened as having very low safety significance because the inspectors answered “no” to all of the questions in the SDP worksheet. The finding has a cross cutting aspect in the corrective action program element of problem identification and resolution because the licensee failed to thoroughly evaluate questions regarding differences between the plant operational configuration and assumptions in the current licensing basis when they did not complete a prompt operability evaluation to assess noted operational disparities (P.1(c)).

The Traditional Enforcement item associated with this item is tracked as NCV 2010005-06.

Inspection Report# : [2010005](#) (pdf)

Significance:  Sep 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Identify Hydrogen Fire Hazards on Pre-Fire Plan

A finding of very low safety significance and associated non-cited violations of a license condition was identified by the inspectors for the failure to identify hydrogen fire hazards on a pre fire plan. Specifically, the licensee failed to identify that a compressed gas cylinder in the Unit 1 sample room contained hydrogen and that the Volume Control Tank valve galleries contained hydrogen piping. The licensee entered this issue into their corrective action program and revised the pre fire plan to reflect the identified hydrogen fire hazards.

The finding was determined to be more than minor because failure to identify hydrogen fire hazards in the pre fire plan could impact the fire brigade’s ability to effectively fight a fire due to the unique hazards associated with hydrogen. The inspectors determined that the finding was of very low safety significance because the fire brigade consisted of plant operators familiar with the 46-foot elevation of the auxiliary building and associated hazards. This finding was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). No cross cutting aspects associated with this finding were identified. (Section 1R05)

Inspection Report# : [2010004](#) (pdf)

Significance:  Sep 30, 2010

Identified By: NRC

Item Type: FIN Finding

Inadequate Acceptance Criteria for Fire Door Surveillance Procedure

A finding of very low safety significance was identified by the inspectors for the failure to provide appropriate acceptance criteria for the fire door surveillance procedure. Specifically, the acceptance criteria for fire door functionality did not specify that doors, when opened, returned to the closed and latched position. The licensee entered this issue into their corrective action program and planned to revise the surveillance procedure.

The finding was determined to be more than minor because if left uncorrected, the failure to have appropriate acceptance criteria would become a more significant safety concern. Specifically, the lack of appropriate fire door functionality acceptance criteria could result in a nonfunctional door closing mechanism and a degraded fire barrier not being detected during surveillance activities. The inspectors determined that the finding was of very low safety significance because the inspectors did not identify any instances where a fire door was left open or unlatched, or an instance where a fire door which would not close on its own and was not monitored for closure. Consequently, the inspectors determined that the finding represented a low degradation and, as such, this finding screened as Green.

This finding was associated with the Mitigating Systems cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e. core damage). This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee's failure to follow procedures, such as the procedure writers' guide, resulted in the failure to provide appropriate acceptance criteria for the fire door surveillance procedure (H.4(b)).

Inspection Report# : [2010004](#) (*pdf*)

Significance:  Sep 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Ensure That RHR Would Be Capable to Respond to a Loss of Cooling Accident at Mode 4

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance for the failure to ensure that residual heat removal (RHR) system would be capable to respond to a loss of coolant accident that initiates in Mode 4. Specifically, the residual heat removal system could experience flash evaporation during a loss of coolant accident at this Mode resulting in steam binding of the system pumps and/or an adverse waterhammer. The licensee entered this issue into the corrective action program and will make procedure changes to ensure the operability of at least one RHR train while in Mode 4.

The performance deficiency was determined to be more than minor because it was associated with the mitigating system cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the capability of systems that respond to initiating events to prevent undesirable consequences. The finding screened as very low safety significance because a Phase II evaluation determined that it represented a change in core damage frequency of less than 5 E-9. The inspectors determined that this finding did not have a cross-cutting aspect.

Inspection Report# : [2010004](#) (*pdf*)

Significance:  Jun 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Enter Abnormal Operating Procedure During Tornado Warning

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to implement a required abnormal operating procedure (AOP) during a period of impending severe weather. Specifically, the licensee failed to enter AOP 13C, "Severe Weather Conditions," during a tornado warning issued by the National Weather Service for the specific location of the plant. The licensee immediately entered the issue into its corrective action program and conducted an apparent cause evaluation of the conditions.

This performance deficiency was more than minor because it was associated with the Mitigating Systems Cornerstone

attribute of protection against external events and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding was determined to be of very low safety significance (Green) because it did not involve the loss or degradation of equipment or function specifically designed to mitigate a seismic, flooding, or severe weather initiating event (e.g., seismic snubbers, flooding barriers, tornado doors), and did not involve the total loss of any safety function. This finding has a cross cutting aspect in the area of human performance, resources, because the licensee did not ensure that personnel, equipment, procedures, and other resources were available and adequate to assure nuclear safety. Specifically, the entry conditions in AOP 13C were out of date and failed to provide an adequate nexus between the purpose and instructions of the procedure (H.2(c)).

Inspection Report# : [2010003](#) (pdf)

Significance:  Jun 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Control the Design of Partially Installed Modifications for Seismic Requirements

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the failure of the licensee's modification process to ensure that new 480 volt cables, installed for the future repowering of various auxiliary feedwater (AFW) system motor operated valves, were installed in accordance with applicable regulatory requirements. Specifically, a seismic design evaluation was not completed prior to the installation of a cable coil suspended above the 2MS 2020 valve, 2P 29 turbine driven AFW pump steam supply. In response to this issue, the licensee installed more robust restraints that satisfied seismic acceptability criteria and performed an evaluation that showed the interim condition of the modification did not challenge operability. At the conclusion of this inspection period, the licensee was in the process of conducting a root cause evaluation. The inspectors also noted that a very similar issue at this site resulted in the issuance of a NCV in the second quarter of 2009.

This performance deficiency was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of design control and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, once identified, the modification required rework to comply with applicable design requirements. The inspectors determined the finding was of very low safety significance (Green) because the issue did not result in the actual loss of a safety function. The inspectors also determined the finding has a cross cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to implement appropriate corrective actions for a previous violation with the same performance deficiency (P.1(d)).

Inspection Report# : [2010003](#) (pdf)

Significance:  Jun 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

PROCEDURES WERE NOT APPROPRIATE TO ADEQUATELY VERIFY AND DOCUMENT THE DESIGN OF NEW OR MODIFIED SSCs WITH RESPECT TO SEISMIC II/I INTERACTIONS.

A finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the failure to provide procedures that were appropriate to verify and document the design of new or modified SSCs with respect to seismic II/I interactions. Specifically, the procedures used for seismic II/I interaction evaluations of new or modified SSCs did not provide guidance for evaluating equipment that was not represented in the earthquake experience or generic testing equipment classes under the scope of the Seismic Qualification Utility Group methodology. Also, no formal guidance was incorporated in modification and seismic procedures to document seismic II/I interaction evaluations. As a result, the licensee did not perform an evaluation that was in accordance with the licensing basis to verify the design of the "B" containment sump strainers of Units 1 and 2 with respect to potential seismic II/I interactions. The licensee entered this issue into its corrective action program.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of protection against external events and adversely affected the cornerstone objective of

ensuring the capability of systems that respond to initiating events to prevent undesirable consequences. This finding was of very low safety significance (Green) because it was a qualification deficiency confirmed not to result in loss of operability or functionality. The inspectors determined that the finding had a cross cutting aspect in the area of problem identification and resolution, self and independent assessments, because the licensee did not conduct self assessments of the Seismic Qualification Utility Group program (P.3(a)).

Inspection Report# : [2010003](#) (*pdf*)

Barrier Integrity

Significance:  Mar 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Unacceptable Preconditioning Of Technical Specification Required Surveillance Test

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," was identified by the inspectors for the licensee's unacceptable preconditioning of a technical specification required surveillance test on September 14, 2010, and January 18, 2011. Specifically, by performing procedure PC 97, Part 7, service water flushes of the Unit 2 containment fan cooler (CFC) units prior to the performance of the fan cooler units' monthly surveillance tests, the licensee failed to ensure that work activities were sequenced in a manner that preserved the as found conditions of the structure, system, and component (SSC), which constituted unacceptable preconditioning. Upon notification from the inspectors of this issue, the licensee initiated a condition report and subsequently performed a condition evaluation that proposed permanent corrective actions such as procedure changes to explicitly prohibit such sequencing of activities. Additionally, in the interim, the licensee immediately communicated to its operators the need to sequence the activities appropriately.

The finding was determined to be more because it was associated with the Barrier Integrity Cornerstone attribute of SSC and Barrier Performance and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers (containment, in this case) protect the public from radionuclide releases caused by accidents or events. Specifically, because the preconditioning altered the as found condition of the CFCs, the data collected through the performance of the procedure TS 34 surveillance tests were not fully indicative of the true equipment performance trends of the CFCs. Therefore, this performance deficiency had a direct effect on the licensee's ability to fully assess the past operability of the system, as well as the ability to trend as found data to assess the reliability of the CFCs. The inspectors determined that the finding has a cross-cutting aspect in the area of human performance, work control, because the licensee did not appropriately coordinate work activities by failing to incorporate actions to address the impact of work on different job activities.

Inspection Report# : [2011002](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: SL-IV Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Submit Licensee Event Report per 10 CFR 50.73(a)(2)(v)(A) and (D).

A Severity Level IV non cited violation of 10 CFR Part 50.73(a)(2)(v)(A) and (D) was identified by the inspectors for the failure of the licensee to report an event or condition that could have prevented the fulfillment of the auxiliary feedwater and safety injection safety functions, which are relied upon to shutdown the reactor and maintain it in a shutdown condition, and mitigate the consequences of an accident. Specifically, the licensee had not properly controlled the blocking open of doors that served as high energy line break barriers. The licensee entered the violation into its corrective action program as condition report 01616620 and revise the procedure on control of high energy line break barriers.

Violations of 10 CFR 50.73 are considered to be violations that potentially impact the regulatory process and are dispositioned using the traditional enforcement process instead of the Reactor Oversight Process Significance Determination Process. A cross-cutting aspect was not assigned to this violation.

Inspection Report# : [2010005](#) (*pdf*)

Last modified : June 07, 2011

Point Beach 2

2Q/2011 Plant Inspection Findings

Initiating Events

Significance:  Mar 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform Required Ultrasonic Exam In Accordance With Procedures

On March 3, 2010, the inspectors identified a finding of very low safety significance and a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for a vendor examiner's failure to follow procedure instructions and perform required circumferential ultrasonic scans of two elbow-to-pipe containment spray line welds. The licensee subsequently performed the scans with no relevant indications detected and documented the failure to perform the scans in the corrective action system.

The finding was determined to be more than minor because, if left uncorrected, the failure to perform the weld examinations could become a more significant safety concern. Absent NRC identification, the licensee would not have performed the full required exam of the weld for an indefinite period of service which would have placed the reactor coolant pressure boundary at increased risk for undetected cracking, leakage, or component failure. This finding was of very low safety significance based on the inspectors answering "No" to the Phase 1 screening question identified in the Containment Barrier column of Table 4a in Attachment 0609.04, "Phase 1 Initial Screening and Characterization of Findings," dated January 10, 2008, of Inspection Manual Chapter 0609, "Significance Determination Process." This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to effectively communicate expectations regarding procedural compliance. Specifically, the failure to perform required circumferential examinations occurred because the licensee's management staff did not adequately stress or enforce procedure adherence for this activity. In particular, procedure NDE-173 was issued as an "Informational Use" type procedure that allowed licensee staff to rely on memory to perform the procedural steps. Inspection Report# : [2011002](#) (*pdf*)

Mitigating Systems

Significance:  Jun 30, 2011

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Safety Injection Pump Discharge Flow Indicator Left Isolated

A finding of very low safety significance and associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the failure to implement the requirements of procedure NP 2.1.1, "Conduct of Operations." Specifically, from July 26, 2010, to February 23, 2011, the licensee failed to track the actual position of the valves associated with FT 925, "2P 15A SI Pump Discharge Flow," which resulted in the failure to return the valves and the transmitter to its normal configuration.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of configuration control and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors answered "No" to all of the questions in the Mitigating Systems column of Table 4a of Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings"; therefore, the finding screened as very low safety significance. The finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to control the related work activity by having procedures to address the impact of changes to the work scope or activity

on the plant and human performance (H.3(a)).

Inspection Report# : [2011003](#) (*pdf*)

Significance:  Jun 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Follow Procedures Needed To Maintain Equipment Operability With Hazard Barriers Out-Of-Service

A finding of very low safety significance and associated non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions Procedures, and Drawings," was identified by the inspectors for the licensee's failure to have appropriate procedures for the control of hazard barriers. Specifically, on August 27, 2010, and as a result of a historical review of plant operating conditions resulting from NRC observations, the licensee identified multiple occurrences of inadequate controls of high energy line break barriers that resulted from inappropriate procedures.

The performance deficiency was determined to be more than minor because it was associated with the protection against external events attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using IMC 0609, "Significance Determination Process," the Region III Senior Risk Analyst performed a Phase 3 analysis, since the risk information from a Phase 2 analysis (Appendix A, "Determining the Safety Significance of Reactor Inspection Findings for At Power Situations," of Inspection Manual Chapter 0609) did not contain the appropriate mitigating equipment and determined that the issue was of very low safety significance. The finding had no cross-cutting aspect associated with it because the issue was related to a failure to incorporate operating experience into procedures from a Regulatory Issue Summary issued in 2001.

Inspection Report# : [2011003](#) (*pdf*)

Significance:  Mar 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Maintain Internal Flood Protection Features On Emergency Diesel Generators G-01 And G-02 Control Cabinets

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the failure of the licensee from 1995 through January 20, 2011, to correctly translate the applicable regulatory requirements and the design basis into specifications, procedures, and instructions. Specifically, the licensee modified the control cabinets of emergency diesel generators G-01 and G-02 in 1995 without the appropriate internal flood protection design features. The licensee initiated condition report AR01610979, took immediate corrective actions to correct the deficient conditions, and performed an apparent cause evaluation. At the end of the inspection period, the licensee continued to implement planned corrective actions that included establishment of preventive maintenance activities to perform flooding seal inspections and extent of condition evaluations to ensure all potential design and licensing basis flooding issues were identified and resolved.

The finding was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of design control and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee failed to ensure that internal flood protection features used to mitigate a design basis accident were maintained. The inspectors determined the finding was of very low safety significance because it was a design or qualification deficiency confirmed not to result in a loss of operability or functionality. The inspectors determined that this finding did not reflect current performance since the error was introduced in a design change that was greater than three years old; therefore, there was no cross-cutting aspect associated with this finding.

Inspection Report# : [2011002](#) (*pdf*)

Significance:  Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Safety System Venting Procedure Void Assessment Requirements

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to establish adequate instructions or appropriate acceptance criteria to ensure that voids vented from safety related piping were evaluated for their effects on system operability. The licensee entered the issue into its corrective action program, performed a condition evaluation, and took actions to revise the deficient procedure.

The issue was more than minor because the lack of procedural controls for void monitoring and assessment resulted in a condition where there was reasonable doubt that the past operability of the system was properly assessed, and that these observations, if left uncorrected, could lead to a condition where an inoperable system or gas intrusion mechanisms would not be identified or corrected. The finding was of very low safety significance, because the inspectors answered "no" to all of the questions in the Mitigating Systems Cornerstone column of the Significance Determination Process worksheet. The inspectors determined that the finding has a cross cutting aspect in the area of human performance, decision making, because the interdisciplinary nature of the observations reflected a lack of a systematic process during the development and execution of the related procedure (H.1(a)).

Inspection Report# : [2010005](#) (*pdf*)

Significance:  Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Ultrasonic Assessment of Safety System Voids as Required by Procedure

A finding of very low safety significance and associated non cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to perform ultrasonic testing on safety related systems for void assessment as required by the licensee's gas accumulation management program. The licensee entered the issue into its corrective action program and has begun the required ultrasonic testing.

The issue was more than minor because the lack of procedural controls for void monitoring and assessment resulted in a condition where there was reasonable doubt that the past operability of the system was properly assessed, and that these observations, if left uncorrected, could lead to a condition where an inoperable system or gas intrusion mechanisms would not be identified or corrected. The issue was determined to be of very low safety significance because the inspectors answered "no" to all of the questions in the Mitigating Systems Cornerstone column of the Significance Determination Process worksheet. The inspectors determined that the finding has a cross cutting aspect in the area of human performance, work practices, because the licensee failed to provide sufficient oversight to ensure that the procedure was followed (H.4(c)).

Inspection Report# : [2010005](#) (*pdf*)

Significance:  Dec 31, 2010

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Multiple ESFAS Steam Line Pressure Channel Modules Inoperable Due to Inadequate Calibration Instructions

A finding of very low safety significance and associated non cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the failure to have adequate maintenance procedures for calibrating the engineered safety features actuation system steam line pressure dynamic compensation modules. Specifically, since the basis calculation for determining the settings of the lead/lag values for the modules did not address dynamic settings, and the proceduralized tolerances were too restrictive, the calibration instructions were inadequate to ensure the modules' ability to perform in accordance with technical specification requirements. Upon discovery, the licensee entered the issue into its corrective action program and performed an apparent cause evaluation that documented a number of planned program and procedural enhancements.

The finding was more than minor because it is associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low safety significance because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the technical specification allowed outage time, and no risk due to external

events. The finding does not have a cross cutting aspect because the performance deficiency occurred outside of the 3-year window considered to be representative of present performance.

Inspection Report# : [2010005](#) (*pdf*)

Significance: SL-IV Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Document a 10 CFR 50.59 Evaluation For Changes Made to Procedure OI-38, Circulating Water System Operation

A Severity Level IV non cited violation of 10 CFR 50.59(d)(1), “Changes, Tests, and Experiments,” was identified by the inspectors for the failure to document an evaluation that provided a basis for the determination that the changes made to procedure OI 38, “Circulating Water System Operation,” did not require a license amendment. Specifically, the licensee failed to provide an evaluation that adequately documented that differences between the procedure changes modifying the operational configuration of the condenser steam dump system and operational considerations and design assumptions outlined within the final safety analysis report and the basis of technical specifications were acceptable. As part of its corrective action, the licensee revised the procedure to remove the original change to the operational configuration of the steam dump system.

The violation was determined to be more than minor because the inspectors could not reasonably determine that the changes would not have ultimately required prior NRC approval. Violations of 10 CFR 50.59 are dispositioned using the traditional enforcement process instead of the Reactor Oversight Process Significance Determination Process (SDP) because they are considered to be violations that could potentially impede or impact the regulatory process. The underlying technical issue was evaluated under the SDP to determine the significance of the violation with respect to core damage probability. The issue screened as having very low safety significance because the inspectors answered “no” to all of the questions in the SDP worksheet. The finding has a cross cutting aspect in the corrective action program element of problem identification and resolution because the licensee failed to thoroughly evaluate questions regarding differences between the plant operational configuration and assumptions in the current licensing basis when they did not complete a prompt operability evaluation to assess noted operational disparities (P.1(c)).

Inspection Report# : [2010005](#) (*pdf*)

Significance:  Dec 31, 2010

Identified By: NRC

Item Type: FIN Finding

Failure to Document a 10 CFR 50.59 Evaluation For Changes Made to Procedure OI-38, Circulating Water System Operation

A Severity Level IV non cited violation of 10 CFR 50.59(d)(1), “Changes, Tests, and Experiments,” was identified by the inspectors for the failure to document an evaluation that provided a basis for the determination that the changes made to procedure OI 38, “Circulating Water System Operation,” did not require a license amendment. Specifically, the licensee failed to provide an evaluation that adequately documented that differences between the procedure changes modifying the operational configuration of the condenser steam dump system and operational considerations and design assumptions outlined within the final safety analysis report and the basis of technical specifications were acceptable. As part of its corrective action, the licensee revised the procedure to remove the original change to the operational configuration of the steam dump system.

The violation was determined to be more than minor because the inspectors could not reasonably determine that the changes would not have ultimately required prior NRC approval. Violations of 10 CFR 50.59 are dispositioned using the traditional enforcement process instead of the Reactor Oversight Process Significance Determination Process (SDP) because they are considered to be violations that could potentially impede or impact the regulatory process. The underlying technical issue was evaluated under the SDP to determine the significance of the violation with respect to core damage probability. The issue screened as having very low safety significance because the inspectors answered “no” to all of the questions in the SDP worksheet. The finding has a cross cutting aspect in the corrective action program element of problem identification and resolution because the licensee failed to thoroughly evaluate questions regarding differences between the plant operational configuration and assumptions in the current licensing basis when they did not complete a prompt operability evaluation to assess noted operational disparities (P.1(c)).

The Traditional Enforcement item associated with this item is tracked as NCV 2010005-06.

Significance:  Sep 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Identify Hydrogen Fire Hazards on Pre-Fire Plan

A finding of very low safety significance and associated non-cited violations of a license condition was identified by the inspectors for the failure to identify hydrogen fire hazards on a pre-fire plan. Specifically, the licensee failed to identify that a compressed gas cylinder in the Unit 1 sample room contained hydrogen and that the Volume Control Tank valve galleries contained hydrogen piping. The licensee entered this issue into their corrective action program and revised the pre-fire plan to reflect the identified hydrogen fire hazards.

The finding was determined to be more than minor because failure to identify hydrogen fire hazards in the pre fire plan could impact the fire brigade's ability to effectively fight a fire due to the unique hazards associated with hydrogen. The inspectors determined that the finding was of very low safety significance because the fire brigade consisted of plant operators familiar with the 46-foot elevation of the auxiliary building and associated hazards. This finding was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). No cross-cutting aspects associated with this finding were identified.

Inspection Report# : [2010004](#) (pdf)

Significance:  Sep 30, 2010

Identified By: NRC

Item Type: FIN Finding

Inadequate Acceptance Criteria for Fire Door Surveillance Procedure

A finding of very low safety significance was identified by the inspectors for the failure to provide appropriate acceptance criteria for the fire door surveillance procedure. Specifically, the acceptance criteria for fire door functionality did not specify that doors, when opened, returned to the closed and latched position. The licensee entered this issue into their corrective action program and planned to revise the surveillance procedure.

The finding was determined to be more than minor because if left uncorrected, the failure to have appropriate acceptance criteria would become a more significant safety concern. Specifically, the lack of appropriate fire door functionality acceptance criteria could result in a nonfunctional door closing mechanism and a degraded fire barrier not being detected during surveillance activities. This finding was associated with the Mitigating Systems cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e. core damage). The inspectors determined that the finding was of very low safety significance because the inspectors did not identify any instances where a fire door was left open or unlatched, or an instance where a fire door which would not close on its own and was not monitored for closure. Consequently, the inspectors determined that the finding represented a low degradation and, as such, this finding screened as Green. This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee's failure to follow procedures, such as the procedure writers' guide, resulted in the failure to provide appropriate acceptance criteria for the fire door surveillance procedure (H.4(b)).

Inspection Report# : [2010004](#) (pdf)

Significance:  Sep 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Ensure That RHR Would Be Capable to Respond to a Loss of Cooling Accident in Mode 4

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the failure to ensure that the residual heat removal (RHR) system would be capable of responding to a loss of coolant accident that occurred in Mode 4. Specifically, the RHR system could experience flash evaporation during a loss of coolant accident in this Mode resulting in steam binding of the system pumps and/or an adverse waterhammer. The licensee entered this issue into the corrective action program and will make procedure changes to ensure the operability of at least one RHR train while in Mode 4.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating System Cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the capability of systems that respond to initiating events to prevent undesirable consequences. The finding screened as very low safety significance because a Phase II evaluation determined that it represented a change in core damage frequency of less than 5 E-9. The inspectors determined that this finding did not have a cross-cutting aspect because it was not obvious that the licensee should have identified the potential problem with RHR.

Inspection Report# : [2010004](#) (*pdf*)

Barrier Integrity

Significance:  Jun 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform An Operability Evaluation For Leakage Inside Containment

A finding of very low safety significance and an associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to perform an operability evaluation of leakage inside containment when it was identified in September 2010. Specifically, on September 26, 2010, condition report AR01397092 identified increased leakage and a related work order was initiated to inspect Unit 1 containment for the leakage source; however, an evaluation of the leak and leak location/source was not performed as required by licensee procedures.

The finding was determined to be more than minor because it was associated with the Barrier Integrity Cornerstone attribute of structure, system, and component and barrier performance, and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers, specifically the containment, would be able to protect the public from radionuclide releases caused by accidents or events. The inspectors answered "No" to all of the questions in the Containment Barrier column of Table 4a of Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings"; therefore, the finding screened as very low safety significance. The finding has a cross-cutting aspect in the area of human performance, decision-making, because the licensee did not use conservative assumptions during the decision making and review process associated with the degraded condition (H.1(b)).

Inspection Report# : [2011003](#) (*pdf*)

Significance:  Mar 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Unacceptable Preconditioning Of Technical Specification Required Surveillance Test

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," was identified by the inspectors for the licensee's unacceptable preconditioning of a technical specification required surveillance test on September 14, 2010, and January 18, 2011. Specifically, by performing procedure PC 97, Part 7, service water flushes of the Unit 2 containment fan cooler (CFC) units prior to the performance of the fan cooler units' monthly surveillance tests, the licensee failed to ensure that work activities were sequenced in a manner that preserved the as found conditions of the structure, system, and component (SSC), which constituted unacceptable preconditioning. Upon notification from the inspectors of this issue, the licensee initiated a condition report and subsequently performed a condition evaluation that proposed permanent corrective actions such as procedure changes to explicitly prohibit such sequencing of activities. Additionally, in the interim, the licensee immediately communicated to its operators the need to sequence the activities appropriately.

The finding was determined to be more because it was associated with the Barrier Integrity Cornerstone attribute of SSC and Barrier Performance and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers (containment, in this case) protect the public from radionuclide releases caused by accidents or events. Specifically, because the preconditioning altered the as found condition of the CFCs, the data collected through the performance of the procedure TS 34 surveillance tests were not fully indicative of the true equipment

performance trends of the CFCs. Therefore, this performance deficiency had a direct effect on the licensee's ability to fully assess the past operability of the system, as well as the ability to trend as found data to assess the reliability of the CFCs. The inspectors determined that the finding has a cross-cutting aspect in the area of human performance, work control, because the licensee did not appropriately coordinate work activities by failing to incorporate actions to address the impact of work on different job activities.

Inspection Report# : [2011002](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: SL-IV Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Submit Licensee Event Report per 10 CFR 50.73(a)(2)(v)(A) and (D)

A Severity Level IV non cited violation of 10 CFR Part 50.73(a)(2)(v)(A) and (D) was identified by the inspectors for the failure of the licensee to report an event or condition that could have prevented the fulfillment of the auxiliary feedwater and safety injection safety functions, which are relied upon to shutdown the reactor and maintain it in a shutdown condition, and mitigate the consequences of an accident. Specifically, the licensee had not properly controlled the blocking open of doors that served as high energy line break barriers. The licensee entered the violation into its corrective action program as condition report 01616620 and revise the procedure on control of high energy line break barriers.

Violations of 10 CFR 50.73 are considered to be violations that potentially impact the regulatory process and are dispositioned using the traditional enforcement process instead of the Reactor Oversight Process Significance Determination Process. A cross-cutting aspect was not assigned to this violation.

Inspection Report# : [2010005](#) (*pdf*)

Last modified : October 14, 2011

Point Beach 2

3Q/2011 Plant Inspection Findings

Initiating Events

Significance:  Sep 02, 2011

Identified By: NRC

Item Type: FIN Finding

Turbine Building Structural Steel Floor Beams Did Not Meet AISC Requirements

. The inspectors identified a finding of very low safety significance involving the licensee's failure to meet the requirements of the American Institute of Steel Construction (AISC) Specification. Specifically, the licensee's design basis calculation failed to ensure the turbine building structural steel floor beams met the AISC specification. This finding was entered into the licensee's corrective action program. No violation of NRC requirements was identified.

The performance deficiency was determined to be more than minor because the finding was associated with the Initiating Events Cornerstone attribute of design control and adversely affected the cornerstone objective to limit the likelihood of those events that upset the plant's stability and challenged critical safety functions during shutdown, as well as power operations. The finding screened as very low safety significance (Green), because the transient initiator would not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. This finding had a cross-cutting aspect in human performance and work practice because the licensee did not ensure effective supervisory and management oversight of work activities, including contractors, such that nuclear safety was supported. Specifically, the licensee failed to have adequate oversight of design calculation and documentation for establishing structural adequacy of the turbine building structural steel beams at EL. 44'-0." [H.2(c)] (Section 4OA5.1.b.(2))

Inspection Report# : [2011009](#) (*pdf*)

Significance:  Mar 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform Required Ultrasonic Exam In Accordance With Procedures

On March 3, 2010, the inspectors identified a finding of very low safety significance and a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for a vendor examiner's failure to follow procedure instructions and perform required circumferential ultrasonic scans of two elbow-to-pipe containment spray line welds. The licensee subsequently performed the scans with no relevant indications detected and documented the failure to perform the scans in the corrective action system.

The finding was determined to be more than minor because, if left uncorrected, the failure to perform the weld examinations could become a more significant safety concern. Absent NRC identification, the licensee would not have performed the full required exam of the weld for an indefinite period of service which would have placed the reactor coolant pressure boundary at increased risk for undetected cracking, leakage, or component failure. This finding was of very low safety significance based on the inspectors answering "No" to the Phase 1 screening question identified in the Containment Barrier column of Table 4a in Attachment 0609.04, "Phase 1 Initial Screening and Characterization of Findings," dated January 10, 2008, of Inspection Manual Chapter 0609, "Significance Determination Process." This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to effectively communicate expectations regarding procedural compliance. Specifically, the failure to perform required circumferential examinations occurred because the licensee's management staff did not adequately stress or enforce procedure adherence for this activity. In particular, procedure NDE-173 was issued as an "Informational Use" type procedure that allowed licensee staff to rely on memory to perform the procedural steps.

Inspection Report# : [2011002](#) (*pdf*)

Mitigating Systems

Significance:  Sep 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform An Operability Evaluation For Rod Drive Control System Failures

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to perform an operability evaluation as required by procedure when degraded/non conforming conditions were identified during a surveillance of the rod drive control system. Specifically, on December 10, 2010, the licensee documented rod trouble alarms in condition report 01401564, but did not identify the degraded/non conforming condition or evaluate the condition relative to support functions for technical specifications (TSs) 3.1.4 and 3.1.6. The licensee entered this issue into its corrective action program for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because it was associated with the Mitigating Systems Cornerstone attribute of equipment performance and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the failure to identify the degraded/non conforming condition and assess the impact on operations and TS requirements resulted in latent conditions that had the potential to be of greater safety significance, and in this case resulted in the failure to evaluate the degraded/non conforming condition relative to TSs 3.1.4 and 3.1.6. This finding has a cross-cutting aspect in the area of human performance, decision-making, because the licensee did not use conservative assumptions during related decision making that adopted a requirement to demonstrate that the proposed action was safe in order to proceed (H.1(b)).

Inspection Report# : [2011004](#) (*pdf*)

Significance:  Sep 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Ensure Tornado Missile Protection For EDGs G01 And G02 Exhaust Stacks

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," involving the licensee's failure to ensure tornado missile protection for two of the emergency diesel generator (EDG) exhaust stacks, which were considered Class I components. The licensee entered this issue into the Corrective Action Program as AR 01678709.

The licensee's failure to ensure tornado missile protection for EDGs G01 and G02 exhaust stacks was a performance deficiency. The performance deficiency was determined to be more than minor because there was reasonable doubt the EDG exhaust stacks would remain functional to support EDG operation in the event tornado-induced missiles damaged the exhaust stacks. The finding screened as very low safety significance because the finding was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. This finding was determined not to have a cross-cutting aspect.

Inspection Report# : [2011004](#) (*pdf*)

Significance:  Sep 02, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Monitor outside Air Temperature

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," involving the licensee's failure to correctly translate design basis assumptions into procedures or instructions. Specifically, the licensee failed to monitor average outside air temperature which was one of the design input criteria for the temperature heat-up calculation associated with rooms

which housed safety-related equipment. This finding was entered into the licensee's corrective action program.

The performance deficiency was associated with Mitigating System Cornerstone and determined to be more than minor because, if left uncorrected, it could lead to a more significant safety concern. The finding screened as very low safety significance (Green) because the finding was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding had a cross-cutting aspect in the area of human performance, resources because the licensee did not ensure adequate training and qualification of personnel. Specifically, the licensee failed to adequately train licensed operators to ensure adequate knowledge with respect to the interface between functionality of a non-safety system component and the impact of a failure on the operability of safety-related equipment. [H.2(b)]. (Section 1R21.3.b.(1))

Inspection Report# : [2011009](#) (pdf)

Significance:  Sep 02, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Incorporate Minimum AFW Flow Requirement into Emergency Procedures

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure to ensure a minimum AFW flow of 275 gpm as specified in the accident analysis for the Loss of Normal Feedwater event. This finding was entered into the licensee's corrective action program.

The performance deficiency was associated with the Mitigating Systems Cornerstone attribute of design control and was determined to be more than minor because, if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, an AFW flow rate of less than 275 gpm as specified in the procedures did not ensure the pressurizer would not become water solid and cause an over-pressure condition within the Reactor Coolant System during the Loss of Normal Feedwater. The finding screened as of very low safety significance (Green) because the finding was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk-significant due to a seismic, flooding, or severe weather initiating event. This finding had a cross-cutting aspect in the area of human performance, resources because the licensee did not maintain design documentation in a complete and accurate manner. Specifically, the licensee failed to maintain Emergency Procedures consistent with the design basis analysis for LONF. [H.2(c)]. (Section 1R21.6.b.(1))

Inspection Report# : [2011009](#) (pdf)

Significance:  Jun 30, 2011

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Safety Injection Pump Discharge Flow Indicator Left Isolated

A finding of very low safety significance and associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the failure to implement the requirements of procedure NP 2.1.1, "Conduct of Operations." Specifically, from July 26, 2010, to February 23, 2011, the licensee failed to track the actual position of the valves associated with FT 925, "2P 15A SI Pump Discharge Flow," which resulted in the failure to return the valves and the transmitter to its normal configuration.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of configuration control and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors answered "No" to all of the questions in the Mitigating Systems column of Table 4a of Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings"; therefore, the finding screened as very low safety significance. The finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to control the related work activity by having procedures to address the impact of changes to the work scope or activity on the plant and human performance (H.3(a)).

Inspection Report# : [2011003](#) (pdf)

Significance:  Jun 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Follow Procedures Needed To Maintain Equipment Operability With Hazard Barriers Out-Of-Service

A finding of very low safety significance and associated non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions Procedures, and Drawings," was identified by the inspectors for the licensee's failure to have appropriate procedures for the control of hazard barriers. Specifically, on August 27, 2010, and as a result of a historical review of plant operating conditions resulting from NRC observations, the licensee identified multiple occurrences of inadequate controls of high energy line break barriers that resulted from inappropriate procedures.

The performance deficiency was determined to be more than minor because it was associated with the protection against external events attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using IMC 0609, "Significance Determination Process," the Region III Senior Risk Analyst performed a Phase 3 analysis, since the risk information from a Phase 2 analysis (Appendix A, "Determining the Safety Significance of Reactor Inspection Findings for At Power Situations," of Inspection Manual Chapter 0609) did not contain the appropriate mitigating equipment and determined that the issue was of very low safety significance. The finding had no cross-cutting aspect associated with it because the issue was related to a failure to incorporate operating experience into procedures from a Regulatory Issue Summary issued in 2001.

Inspection Report# : [2011003](#) (*pdf*)

Significance:  Mar 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Maintain Internal Flood Protection Features On Emergency Diesel Generators G-01 And G-02 Control Cabinets

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the failure of the licensee from 1995 through January 20, 2011, to correctly translate the applicable regulatory requirements and the design basis into specifications, procedures, and instructions. Specifically, the licensee modified the control cabinets of emergency diesel generators G-01 and G-02 in 1995 without the appropriate internal flood protection design features. The licensee initiated condition report AR01610979, took immediate corrective actions to correct the deficient conditions, and performed an apparent cause evaluation. At the end of the inspection period, the licensee continued to implement planned corrective actions that included establishment of preventive maintenance activities to perform flooding seal inspections and extent of condition evaluations to ensure all potential design and licensing basis flooding issues were identified and resolved.

The finding was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of design control and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee failed to ensure that internal flood protection features used to mitigate a design basis accident were maintained. The inspectors determined the finding was of very low safety significance because it was a design or qualification deficiency confirmed not to result in a loss of operability or functionality. The inspectors determined that this finding did not reflect current performance since the error was introduced in a design change that was greater than three years old; therefore, there was no cross-cutting aspect associated with this finding.

Inspection Report# : [2011002](#) (*pdf*)

Significance:  Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Safety System Venting Procedure Void Assessment Requirements

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to establish adequate instructions or appropriate acceptance criteria to ensure that voids vented from safety related piping were

evaluated for their effects on system operability. The licensee entered the issue into its corrective action program, performed a condition evaluation, and took actions to revise the deficient procedure.

The issue was more than minor because the lack of procedural controls for void monitoring and assessment resulted in a condition where there was reasonable doubt that the past operability of the system was properly assessed, and that these observations, if left uncorrected, could lead to a condition where an inoperable system or gas intrusion mechanisms would not be identified or corrected. The finding was of very low safety significance, because the inspectors answered “no” to all of the questions in the Mitigating Systems Cornerstone column of the Significance Determination Process worksheet. The inspectors determined that the finding has a cross cutting aspect in the area of human performance, decision making, because the interdisciplinary nature of the observations reflected a lack of a systematic process during the development and execution of the related procedure (H.1(a)).

Inspection Report# : [2010005](#) (*pdf*)

Significance:  Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Ultrasonic Assessment of Safety System Voids as Required by Procedure

A finding of very low safety significance and associated non cited violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” was identified by the inspectors for the licensee’s failure to perform ultrasonic testing on safety related systems for void assessment as required by the licensee’s gas accumulation management program. The licensee entered the issue into its corrective action program and has begun the required ultrasonic testing.

The issue was more than minor because the lack of procedural controls for void monitoring and assessment resulted in a condition where there was reasonable doubt that the past operability of the system was properly assessed, and that these observations, if left uncorrected, could lead to a condition where an inoperable system or gas intrusion mechanisms would not be identified or corrected. The issue was determined to be of very low safety significance because the inspectors answered “no” to all of the questions in the Mitigating Systems Cornerstone column of the Significance Determination Process worksheet. The inspectors determined that the finding has a cross cutting aspect in the area of human performance, work practices, because the licensee failed to provide sufficient oversight to ensure that the procedure was followed (H.4(c)).

Inspection Report# : [2010005](#) (*pdf*)

Significance:  Dec 31, 2010

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Multiple ESFAS Steam Line Pressure Channel Modules Inoperable Due to Inadequate Calibration Instructions

A finding of very low safety significance and associated non cited violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” was self-revealed for the failure to have adequate maintenance procedures for calibrating the engineered safety features actuation system steam line pressure dynamic compensation modules. Specifically, since the basis calculation for determining the settings of the lead/lag values for the modules did not address dynamic settings, and the proceduralized tolerances were too restrictive, the calibration instructions were inadequate to ensure the modules’ ability to perform in accordance with technical specification requirements. Upon discovery, the licensee entered the issue into its corrective action program and performed an apparent cause evaluation that documented a number of planned program and procedural enhancements.

The finding was more than minor because it is associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low safety significance because there was no design deficiency, no actual loss of safety function, no single train loss of safety function for greater than the technical specification allowed outage time, and no risk due to external events. The finding does not have a cross cutting aspect because the performance deficiency occurred outside of the 3-year window considered to be representative of present performance.

Inspection Report# : [2010005](#) (pdf)

Significance: SL-IV Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Document a 10 CFR 50.59 Evaluation For Changes Made to Procedure OI-38, Circulating Water System Operation

A Severity Level IV non cited violation of 10 CFR 50.59(d)(1), “Changes, Tests, and Experiments,” was identified by the inspectors for the failure to document an evaluation that provided a basis for the determination that the changes made to procedure OI 38, “Circulating Water System Operation,” did not require a license amendment. Specifically, the licensee failed to provide an evaluation that adequately documented that differences between the procedure changes modifying the operational configuration of the condenser steam dump system and operational considerations and design assumptions outlined within the final safety analysis report and the basis of technical specifications were acceptable. As part of its corrective action, the licensee revised the procedure to remove the original change to the operational configuration of the steam dump system.

The violation was determined to be more than minor because the inspectors could not reasonably determine that the changes would not have ultimately required prior NRC approval. Violations of 10 CFR 50.59 are dispositioned using the traditional enforcement process instead of the Reactor Oversight Process Significance Determination Process (SDP) because they are considered to be violations that could potentially impede or impact the regulatory process. The underlying technical issue was evaluated under the SDP to determine the significance of the violation with respect to core damage probability. The issue screened as having very low safety significance because the inspectors answered “no” to all of the questions in the SDP worksheet. The finding has a cross cutting aspect in the corrective action program element of problem identification and resolution because the licensee failed to thoroughly evaluate questions regarding differences between the plant operational configuration and assumptions in the current licensing basis when they did not complete a prompt operability evaluation to assess noted operational disparities (P.1(c)).

Inspection Report# : [2010005](#) (pdf)

Significance:  Dec 31, 2010

Identified By: NRC

Item Type: FIN Finding

Failure to Document a 10 CFR 50.59 Evaluation For Changes Made to Procedure OI-38, Circulating Water System Operation

A Severity Level IV non cited violation of 10 CFR 50.59(d)(1), “Changes, Tests, and Experiments,” was identified by the inspectors for the failure to document an evaluation that provided a basis for the determination that the changes made to procedure OI 38, “Circulating Water System Operation,” did not require a license amendment. Specifically, the licensee failed to provide an evaluation that adequately documented that differences between the procedure changes modifying the operational configuration of the condenser steam dump system and operational considerations and design assumptions outlined within the final safety analysis report and the basis of technical specifications were acceptable. As part of its corrective action, the licensee revised the procedure to remove the original change to the operational configuration of the steam dump system.

The violation was determined to be more than minor because the inspectors could not reasonably determine that the changes would not have ultimately required prior NRC approval. Violations of 10 CFR 50.59 are dispositioned using the traditional enforcement process instead of the Reactor Oversight Process Significance Determination Process (SDP) because they are considered to be violations that could potentially impede or impact the regulatory process. The underlying technical issue was evaluated under the SDP to determine the significance of the violation with respect to core damage probability. The issue screened as having very low safety significance because the inspectors answered “no” to all of the questions in the SDP worksheet. The finding has a cross cutting aspect in the corrective action program element of problem identification and resolution because the licensee failed to thoroughly evaluate questions regarding differences between the plant operational configuration and assumptions in the current licensing basis when they did not complete a prompt operability evaluation to assess noted operational disparities (P.1(c)).

The Traditional Enforcement item associated with this item is tracked as NCV 2010005-06.

Inspection Report# : [2010005](#) (pdf)

Barrier Integrity

Significance:  Sep 02, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Containment Spray Pipe Support Deficiencies

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," involving the licensee's failure to ensure the Containment Spray Pipe Support 2S-249 and Containment Spray Pipe Anchor 2A-35 meet Seismic Category I requirements. This finding was entered into the licensee's corrective action program.

The performance deficiency was determined to be more than minor because it was associated with the Barrier Integrity Cornerstone attribute of design control and adversely affected the cornerstone objective to provide reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. This finding is of very low safety significance (Green) because there was no actual barrier degradation. The inspectors did not identify a cross-cutting aspect associated with this finding because this was a legacy design issue; and therefore, was not reflective of current performance. (Section 40A5.1.b.(1))

Inspection Report# : [2011009](#) (*pdf*)

Significance:  Jun 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform An Operability Evaluation For Leakage Inside Containment

A finding of very low safety significance and an associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to perform an operability evaluation of leakage inside containment when it was identified in September 2010. Specifically, on September 26, 2010, condition report AR01397092 identified increased leakage and a related work order was initiated to inspect Unit 1 containment for the leakage source; however, an evaluation of the leak and leak location/source was not performed as required by licensee procedures.

The finding was determined to be more than minor because it was associated with the Barrier Integrity Cornerstone attribute of structure, system, and component and barrier performance, and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers, specifically the containment, would be able to protect the public from radionuclide releases caused by accidents or events. The inspectors answered "No" to all of the questions in the Containment Barrier column of Table 4a of Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings"; therefore, the finding screened as very low safety significance. The finding has a cross-cutting aspect in the area of human performance, decision-making, because the licensee did not use conservative assumptions during the decision making and review process associated with the degraded condition (H.1(b)).

Inspection Report# : [2011003](#) (*pdf*)

Significance:  Mar 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Unacceptable Preconditioning Of Technical Specification Required Surveillance Test

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," was identified by the inspectors for the licensee's unacceptable preconditioning of a technical specification required surveillance test on September 14, 2010, and January 18, 2011. Specifically, by performing procedure PC 97, Part 7, service water flushes of the Unit 2 containment fan cooler (CFC) units prior to the performance of the fan cooler units' monthly surveillance tests, the licensee failed to ensure that work activities were sequenced in a manner that preserved the as found conditions of the structure, system, and component (SSC), which constituted unacceptable preconditioning. Upon notification from the inspectors of this issue, the licensee initiated a condition report and subsequently performed a condition evaluation that proposed permanent corrective actions such

as procedure changes to explicitly prohibit such sequencing of activities. Additionally, in the interim, the licensee immediately communicated to its operators the need to sequence the activities appropriately.

The finding was determined to be more because it was associated with the Barrier Integrity Cornerstone attribute of SSC and Barrier Performance and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers (containment, in this case) protect the public from radionuclide releases caused by accidents or events. Specifically, because the preconditioning altered the as found condition of the CFCs, the data collected through the performance of the procedure TS 34 surveillance tests were not fully indicative of the true equipment performance trends of the CFCs. Therefore, this performance deficiency had a direct effect on the licensee's ability to fully assess the past operability of the system, as well as the ability to trend as found data to assess the reliability of the CFCs. The inspectors determined that the finding has a cross-cutting aspect in the area of human performance, work control, because the licensee did not appropriately coordinate work activities by failing to incorporate actions to address the impact of work on different job activities.

Inspection Report# : [2011002](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: SL-IV Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Submit Licensee Event Report per 10 CFR 50.73(a)(2)(v)(A) and (D)

A Severity Level IV non cited violation of 10 CFR Part 50.73(a)(2)(v)(A) and (D) was identified by the inspectors for the failure of the licensee to report an event or condition that could have prevented the fulfillment of the auxiliary feedwater and safety injection safety functions, which are relied upon to shutdown the reactor and maintain it in a shutdown condition, and mitigate the consequences of an accident. Specifically, the licensee had not properly controlled the blocking open of doors that served as high energy line break barriers. The licensee entered the violation into its corrective action program as condition report 01616620 and revise the procedure on control of high energy line break barriers.

Violations of 10 CFR 50.73 are considered to be violations that potentially impact the regulatory process and are dispositioned using the traditional enforcement process instead of the Reactor Oversight Process Significance Determination Process. A cross-cutting aspect was not assigned to this violation.

Inspection Report# : [2010005](#) (pdf)

Last modified : January 04, 2012

Point Beach 2

4Q/2011 Plant Inspection Findings

Initiating Events

Significance:  Sep 02, 2011

Identified By: NRC

Item Type: FIN Finding

Turbine Building Structural Steel Floor Beams Did Not Meet AISC Requirements

. The inspectors identified a finding of very low safety significance involving the licensee's failure to meet the requirements of the American Institute of Steel Construction (AISC) Specification. Specifically, the licensee's design basis calculation failed to ensure the turbine building structural steel floor beams met the AISC specification. This finding was entered into the licensee's corrective action program. No violation of NRC requirements was identified.

The performance deficiency was determined to be more than minor because the finding was associated with the Initiating Events Cornerstone attribute of design control and adversely affected the cornerstone objective to limit the likelihood of those events that upset the plant's stability and challenged critical safety functions during shutdown, as well as power operations. The finding screened as very low safety significance (Green), because the transient initiator would not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. This finding had a cross-cutting aspect in human performance and work practice because the licensee did not ensure effective supervisory and management oversight of work activities, including contractors, such that nuclear safety was supported. Specifically, the licensee failed to have adequate oversight of design calculation and documentation for establishing structural adequacy of the turbine building structural steel beams at EL. 44'-0." [H.2(c)] (Section 4OA5.1.b.(2))

Inspection Report# : [2011009](#) (*pdf*)

Significance:  Mar 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform Required Ultrasonic Exam In Accordance With Procedures

On March 3, 2010, the inspectors identified a finding of very low safety significance and a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for a vendor examiner's failure to follow procedure instructions and perform required circumferential ultrasonic scans of two elbow-to-pipe containment spray line welds. The licensee subsequently performed the scans with no relevant indications detected and documented the failure to perform the scans in the corrective action system.

The finding was determined to be more than minor because, if left uncorrected, the failure to perform the weld examinations could become a more significant safety concern. Absent NRC identification, the licensee would not have performed the full required exam of the weld for an indefinite period of service which would have placed the reactor coolant pressure boundary at increased risk for undetected cracking, leakage, or component failure. This finding was of very low safety significance based on the inspectors answering "No" to the Phase 1 screening question identified in the Containment Barrier column of Table 4a in Attachment 0609.04, "Phase 1 Initial Screening and Characterization of Findings," dated January 10, 2008, of Inspection Manual Chapter 0609, "Significance Determination Process." This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to effectively communicate expectations regarding procedural compliance. Specifically, the failure to perform required circumferential examinations occurred because the licensee's management staff did not adequately stress or enforce procedure adherence for this activity. In particular, procedure NDE-173 was issued as an "Informational Use" type procedure that allowed licensee staff to rely on memory to perform the procedural steps.

Inspection Report# : [2011002](#) (*pdf*)

Mitigating Systems

Significance:  Sep 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform An Operability Evaluation For Rod Drive Control System Failures

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to perform an operability evaluation as required by procedure when degraded/non conforming conditions were identified during a surveillance of the rod drive control system. Specifically, on December 10, 2010, the licensee documented rod trouble alarms in condition report 01401564, but did not identify the degraded/non conforming condition or evaluate the condition relative to support functions for technical specifications (TSs) 3.1.4 and 3.1.6. The licensee entered this issue into its corrective action program for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because it was associated with the Mitigating Systems Cornerstone attribute of equipment performance and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the failure to identify the degraded/non conforming condition and assess the impact on operations and TS requirements resulted in latent conditions that had the potential to be of greater safety significance, and in this case resulted in the failure to evaluate the degraded/non conforming condition relative to TSs 3.1.4 and 3.1.6. This finding has a cross-cutting aspect in the area of human performance, decision-making, because the licensee did not use conservative assumptions during related decision making that adopted a requirement to demonstrate that the proposed action was safe in order to proceed (H.1(b)).

Inspection Report# : [2011004](#) (*pdf*)

Significance:  Sep 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Ensure Tornado Missile Protection For EDGs G01 And G02 Exhaust Stacks

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," involving the licensee's failure to ensure tornado missile protection for two of the emergency diesel generator (EDG) exhaust stacks, which were considered Class I components. The licensee entered this issue into the Corrective Action Program as AR 01678709.

The licensee's failure to ensure tornado missile protection for EDGs G01 and G02 exhaust stacks was a performance deficiency. The performance deficiency was determined to be more than minor because there was reasonable doubt the EDG exhaust stacks would remain functional to support EDG operation in the event tornado-induced missiles damaged the exhaust stacks. The finding screened as very low safety significance because the finding was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. This finding was determined not to have a cross-cutting aspect.

Inspection Report# : [2011004](#) (*pdf*)

Significance:  Sep 02, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Monitor outside Air Temperature

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," involving the licensee's failure to correctly translate design basis assumptions into procedures or instructions. Specifically, the licensee failed to monitor average outside air temperature which was one of the design input criteria for the temperature heat-up calculation associated with rooms

which housed safety-related equipment. This finding was entered into the licensee's corrective action program.

The performance deficiency was associated with Mitigating System Cornerstone and determined to be more than minor because, if left uncorrected, it could lead to a more significant safety concern. The finding screened as very low safety significance (Green) because the finding was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding had a cross-cutting aspect in the area of human performance, resources because the licensee did not ensure adequate training and qualification of personnel. Specifically, the licensee failed to adequately train licensed operators to ensure adequate knowledge with respect to the interface between functionality of a non-safety system component and the impact of a failure on the operability of safety-related equipment. [H.2(b)]. (Section 1R21.3.b.(1))

Inspection Report# : [2011009](#) (pdf)

Significance:  Sep 02, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Incorporate Minimum AFW Flow Requirement into Emergency Procedures

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure to ensure a minimum AFW flow of 275 gpm as specified in the accident analysis for the Loss of Normal Feedwater event. This finding was entered into the licensee's corrective action program.

The performance deficiency was associated with the Mitigating Systems Cornerstone attribute of design control and was determined to be more than minor because, if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, an AFW flow rate of less than 275 gpm as specified in the procedures did not ensure the pressurizer would not become water solid and cause an over-pressure condition within the Reactor Coolant System during the Loss of Normal Feedwater. The finding screened as of very low safety significance (Green) because the finding was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk-significant due to a seismic, flooding, or severe weather initiating event. This finding had a cross-cutting aspect in the area of human performance, resources because the licensee did not maintain design documentation in a complete and accurate manner. Specifically, the licensee failed to maintain Emergency Procedures consistent with the design basis analysis for LONF. [H.2(c)]. (Section 1R21.6.b.(1))

Inspection Report# : [2011009](#) (pdf)

Significance:  Jun 30, 2011

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Safety Injection Pump Discharge Flow Indicator Left Isolated

A finding of very low safety significance and associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the failure to implement the requirements of procedure NP 2.1.1, "Conduct of Operations." Specifically, from July 26, 2010, to February 23, 2011, the licensee failed to track the actual position of the valves associated with FT 925, "2P 15A SI Pump Discharge Flow," which resulted in the failure to return the valves and the transmitter to its normal configuration.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of configuration control and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors answered "No" to all of the questions in the Mitigating Systems column of Table 4a of Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings"; therefore, the finding screened as very low safety significance. The finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to control the related work activity by having procedures to address the impact of changes to the work scope or activity on the plant and human performance (H.3(a)).

Inspection Report# : [2011003](#) (pdf)

Significance:  Jun 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Follow Procedures Needed To Maintain Equipment Operability With Hazard Barriers Out-Of-Service

A finding of very low safety significance and associated non-cited violation of 10 CFR 50, Appendix B, Criterion V, “Instructions Procedures, and Drawings,” was identified by the inspectors for the licensee’s failure to have appropriate procedures for the control of hazard barriers. Specifically, on August 27, 2010, and as a result of a historical review of plant operating conditions resulting from NRC observations, the licensee identified multiple occurrences of inadequate controls of high energy line break barriers that resulted from inappropriate procedures.

The performance deficiency was determined to be more than minor because it was associated with the protection against external events attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using IMC 0609, “Significance Determination Process,” the Region III Senior Risk Analyst performed a Phase 3 analysis, since the risk information from a Phase 2 analysis (Appendix A, “Determining the Safety Significance of Reactor Inspection Findings for At Power Situations,” of Inspection Manual Chapter 0609) did not contain the appropriate mitigating equipment and determined that the issue was of very low safety significance. The finding had no cross-cutting aspect associated with it because the issue was related to a failure to incorporate operating experience into procedures from a Regulatory Issue Summary issued in 2001.

Inspection Report# : [2011003](#) (*pdf*)

Significance:  Mar 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Maintain Internal Flood Protection Features On Emergency Diesel Generators G-01 And G-02 Control Cabinets

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” was identified by the inspectors for the failure of the licensee from 1995 through January 20, 2011, to correctly translate the applicable regulatory requirements and the design basis into specifications, procedures, and instructions. Specifically, the licensee modified the control cabinets of emergency diesel generators G-01 and G-02 in 1995 without the appropriate internal flood protection design features. The licensee initiated condition report AR01610979, took immediate corrective actions to correct the deficient conditions, and performed an apparent cause evaluation. At the end of the inspection period, the licensee continued to implement planned corrective actions that included establishment of preventive maintenance activities to perform flooding seal inspections and extent of condition evaluations to ensure all potential design and licensing basis flooding issues were identified and resolved.

The finding was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of design control and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee failed to ensure that internal flood protection features used to mitigate a design basis accident were maintained. The inspectors determined the finding was of very low safety significance because it was a design or qualification deficiency confirmed not to result in a loss of operability or functionality. The inspectors determined that this finding did not reflect current performance since the error was introduced in a design change that was greater than three years old; therefore, there was no cross-cutting aspect associated with this finding.

Inspection Report# : [2011002](#) (*pdf*)

Barrier Integrity

Significance:  Sep 02, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Containment Spray Pipe Support Deficiencies

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," involving the licensee's failure to ensure the Containment Spray Pipe Support 2S-249 and Containment Spray Pipe Anchor 2A-35 meet Seismic Category I requirements. This finding was entered into the licensee's corrective action program.

The performance deficiency was determined to be more than minor because it was associated with the Barrier Integrity Cornerstone attribute of design control and adversely affected the cornerstone objective to provide reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. This finding is of very low safety significance (Green) because there was no actual barrier degradation. The inspectors did not identify a cross-cutting aspect associated with this finding because this was a legacy design issue; and therefore, was not reflective of current performance. (Section 40A5.1.b.(1))

Inspection Report# : [2011009](#) (*pdf*)

Significance:  Jun 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform An Operability Evaluation For Leakage Inside Containment

A finding of very low safety significance and an associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to perform an operability evaluation of leakage inside containment when it was identified in September 2010. Specifically, on September 26, 2010, condition report AR01397092 identified increased leakage and a related work order was initiated to inspect Unit 1 containment for the leakage source; however, an evaluation of the leak and leak location/source was not performed as required by licensee procedures.

The finding was determined to be more than minor because it was associated with the Barrier Integrity Cornerstone attribute of structure, system, and component and barrier performance, and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers, specifically the containment, would be able to protect the public from radionuclide releases caused by accidents or events. The inspectors answered "No" to all of the questions in the Containment Barrier column of Table 4a of Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings"; therefore, the finding screened as very low safety significance. The finding has a cross-cutting aspect in the area of human performance, decision-making, because the licensee did not use conservative assumptions during the decision making and review process associated with the degraded condition (H.1(b)).

Inspection Report# : [2011003](#) (*pdf*)

Significance:  Mar 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Unacceptable Preconditioning Of Technical Specification Required Surveillance Test

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," was identified by the inspectors for the licensee's unacceptable preconditioning of a technical specification required surveillance test on September 14, 2010, and January 18, 2011. Specifically, by performing procedure PC 97, Part 7, service water flushes of the Unit 2 containment fan cooler (CFC) units prior to the performance of the fan cooler units' monthly surveillance tests, the licensee failed to ensure that work activities were sequenced in a manner that preserved the as found conditions of the structure, system, and component (SSC), which constituted unacceptable preconditioning. Upon notification from the inspectors of this issue, the licensee initiated a condition report and subsequently performed a condition evaluation that proposed permanent corrective actions such as procedure changes to explicitly prohibit such sequencing of activities. Additionally, in the interim, the licensee immediately communicated to its operators the need to sequence the activities appropriately.

The finding was determined to be more because it was associated with the Barrier Integrity Cornerstone attribute of SSC and Barrier Performance and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers (containment, in this case) protect the public from radionuclide releases caused by accidents

or events. Specifically, because the preconditioning altered the as found condition of the CFCs, the data collected through the performance of the procedure TS 34 surveillance tests were not fully indicative of the true equipment performance trends of the CFCs. Therefore, this performance deficiency had a direct effect on the licensee's ability to fully assess the past operability of the system, as well as the ability to trend as found data to assess the reliability of the CFCs. The inspectors determined that the finding has a cross-cutting aspect in the area of human performance, work control, because the licensee did not appropriately coordinate work activities by failing to incorporate actions to address the impact of work on different job activities.

Inspection Report# : [2011002](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : March 02, 2012

Point Beach 2

1Q/2012 Plant Inspection Findings

Initiating Events

Significance: G Sep 02, 2011

Identified By: NRC

Item Type: FIN Finding

Turbine Building Structural Steel Floor Beams Did Not Meet AISC Requirements

. The inspectors identified a finding of very low safety significance involving the licensee's failure to meet the requirements of the American Institute of Steel Construction (AISC) Specification. Specifically, the licensee's design basis calculation failed to ensure the turbine building structural steel floor beams met the AISC specification. This finding was entered into the licensee's corrective action program. No violation of NRC requirements was identified.

The performance deficiency was determined to be more than minor because the finding was associated with the Initiating Events Cornerstone attribute of design control and adversely affected the cornerstone objective to limit the likelihood of those events that upset the plant's stability and challenged critical safety functions during shutdown, as well as power operations. The finding screened as very low safety significance (Green), because the transient initiator would not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. This finding had a cross-cutting aspect in human performance and work practice because the licensee did not ensure effective supervisory and management oversight of work activities, including contractors, such that nuclear safety was supported. Specifically, the licensee failed to have adequate oversight of design calculation and documentation for establishing structural adequacy of the turbine building structural steel beams at EL. 44'-0." [H.2(c)] (Section 40A5.1.b.(2))

Inspection Report# : [2011009](#) (*pdf*)

Mitigating Systems

Significance: G Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Follow Procedure And Implement Post-Maintenance Testing For Main Feedwater Regulating Valves Following EPU Modifications

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," because the licensee failed to follow work orders to properly configure and perform post maintenance testing (PMT) of the main feedwater regulating valve (MFRV) limit switches. As a result, the limit switches that provide an input into the anticipated transient without scram mitigation system actuation circuitry (AMSAC) were not tested. Specifically, on June 10, 2011, when engineering change EC 12054 for the MFRVs was partially turned over to and accepted by operations for Mode 2 and AMSAC was required to be functioning, the licensee failed to perform a PMT as required by plant procedures. The licensee entered this issue into its corrective action program for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because, if left uncorrected, the failure to perform PMT could lead to a more significant safety concern. Specifically, the failure to perform PMT of safety or risk related components prior to the operational condition for which the equipment was required could result in a latent failure that would only be discovered during a valid demand. This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee did not appropriately coordinate work activities by incorporating action to address the impact of changes to the activity on the plant and human performance. (H.3(b))

Inspection Report# : [2012002](#) (pdf)

Significance:  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform Operability Evaluations As Required By Procedure

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to perform an operability evaluation of the impact of door deficiencies on their ability to function as a high energy line break (HELB) barrier, fire (safe shutdown) door, and flood barrier. Specifically, the inspectors identified condition reports written between December 13, 2011, and March 8, 2012, for degraded doors credited as HELB barriers, safe shutdown doors, and flood barriers; however, the licensee failed to perform an operability evaluation of the conditions as required by plant procedures. The licensee entered this issue into its corrective action program for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because, if left uncorrected, the failure to perform operability evaluations and recognize conditions that could render equipment inoperable could lead to a more significant safety concern. The finding has a cross-cutting aspect in the area of problem identification and resolution, corrective action, because the licensee failed to take appropriate action to address safety issues and adverse trends in a timely manner. Although the licensee had previously recognized this and initiated training to correct the knowledge based aspects of the issue, there were no interim barriers in place during the long duration needed to complete the training activity. (P.1(d))

Inspection Report# : [2012002](#) (pdf)

Significance:  Sep 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform An Operability Evaluation For Rod Drive Control System Failures

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to perform an operability evaluation as required by procedure when degraded/non conforming conditions were identified during a surveillance of the rod drive control system. Specifically, on December 10, 2010, the licensee documented rod trouble alarms in condition report 01401564, but did not identify the degraded/non conforming condition or evaluate the condition relative to support functions for technical specifications (TSs) 3.1.4 and 3.1.6. The licensee entered this issue into its corrective action program for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because it was associated with the Mitigating Systems Cornerstone attribute of equipment performance and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the failure to identify the degraded/non conforming condition and assess the impact on operations and TS requirements resulted in latent conditions that had the potential to be of greater safety significance, and in this case resulted in the failure to evaluate the degraded/non conforming condition relative to TSs 3.1.4 and 3.1.6. This finding has a cross-cutting aspect in the area of human performance, decision-making, because the licensee did not use conservative assumptions during related decision making that adopted a requirement to demonstrate that the proposed action was safe in order to proceed (H.1(b)).

Inspection Report# : [2011004](#) (pdf)

Significance:  Sep 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Ensure Tornado Missile Protection For EDGs G01 And G02 Exhaust Stacks

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," involving the licensee's failure to ensure tornado missile protection for two of the emergency diesel generator (EDG) exhaust stacks, which were considered Class I components. The licensee entered this issue into the Corrective Action Program as AR 01678709.

The licensee's failure to ensure tornado missile protection for EDGs G01 and G02 exhaust stacks was a performance deficiency. The performance deficiency was determined to be more than minor because there was reasonable doubt the EDG exhaust stacks would remain functional to support EDG operation in the event tornado-induced missiles damaged the exhaust stacks. The finding screened as very low safety significance because the finding was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. This finding was determined not to have a cross-cutting aspect.

Inspection Report# : [2011004](#) (pdf)

Significance:  Sep 02, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Monitor outside Air Temperature

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," involving the licensee's failure to correctly translate design basis assumptions into procedures or instructions. Specifically, the licensee failed to monitor average outside air temperature which was one of the design input criteria for the temperature heat-up calculation associated with rooms which housed safety-related equipment. This finding was entered into the licensee's corrective action program.

The performance deficiency was associated with Mitigating System Cornerstone and determined to be more than minor because, if left uncorrected, it could lead to a more significant safety concern. The finding screened as very low safety significance (Green) because the finding was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding had a cross-cutting aspect in the area of human performance, resources because the licensee did not ensure adequate training and qualification of personnel. Specifically, the licensee failed to adequately train licensed operators to ensure adequate knowledge with respect to the interface between functionality of a non-safety system component and the impact of a failure on the operability of safety-related equipment. [H.2(b)]. (Section 1R21.3.b.(1))

Inspection Report# : [2011009](#) (pdf)

Significance:  Sep 02, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Incorporate Minimum AFW Flow Requirement into Emergency Procedures

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure to ensure a minimum AFW flow of 275 gpm as specified in the accident analysis for the Loss of Normal Feedwater event. This finding was entered into the licensee's corrective action program.

The performance deficiency was associated with the Mitigating Systems Cornerstone attribute of design control and was determined to be more than minor because, if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, an AFW flow rate of less than 275 gpm as specified in the procedures did not ensure the pressurizer would not become water solid and cause an over-pressure condition within the Reactor Coolant System during the Loss of Normal Feedwater. The finding screened as of very low safety significance (Green) because the finding was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk-significant due to a seismic, flooding, or severe weather initiating event. This finding had a cross-cutting aspect in the area of human performance, resources because the licensee did not maintain design documentation in a complete and accurate manner. Specifically, the licensee failed to maintain Emergency Procedures consistent with the design basis analysis for LONF. [H.2(c)]. (Section 1R21.6.b.(1))

Significance:  Jun 30, 2011

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Safety Injection Pump Discharge Flow Indicator Left Isolated

A finding of very low safety significance and associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the failure to implement the requirements of procedure NP 2.1.1, "Conduct of Operations." Specifically, from July 26, 2010, to February 23, 2011, the licensee failed to track the actual position of the valves associated with FT 925, "2P 15A SI Pump Discharge Flow," which resulted in the failure to return the valves and the transmitter to its normal configuration.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of configuration control and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors answered "No" to all of the questions in the Mitigating Systems column of Table 4a of Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings"; therefore, the finding screened as very low safety significance. The finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to control the related work activity by having procedures to address the impact of changes to the work scope or activity on the plant and human performance (H.3(a)).

Inspection Report# : [2011003](#) (pdf)

Significance:  Jun 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Follow Procedures Needed To Maintain Equipment Operability With Hazard Barriers Out-Of-Service

A finding of very low safety significance and associated non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions Procedures, and Drawings," was identified by the inspectors for the licensee's failure to have appropriate procedures for the control of hazard barriers. Specifically, on August 27, 2010, and as a result of a historical review of plant operating conditions resulting from NRC observations, the licensee identified multiple occurrences of inadequate controls of high energy line break barriers that resulted from inappropriate procedures.

The performance deficiency was determined to be more than minor because it was associated with the protection against external events attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using IMC 0609, "Significance Determination Process," the Region III Senior Risk Analyst performed a Phase 3 analysis, since the risk information from a Phase 2 analysis (Appendix A, "Determining the Safety Significance of Reactor Inspection Findings for At Power Situations," of Inspection Manual Chapter 0609) did not contain the appropriate mitigating equipment and determined that the issue was of very low safety significance. The finding had no cross-cutting aspect associated with it because the issue was related to a failure to incorporate operating experience into procedures from a Regulatory Issue Summary issued in 2001.

Inspection Report# : [2011003](#) (pdf)

Barrier Integrity

Significance:  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Scaffold Construction Interferes With The Operation Of Containment Spray Suction Valve

A finding of very low safety significance and a non-cited violation of 10 CFR 50, Appendix B, Criterion V,

“Instructions, Procedures, and Drawings,” were self revealed during the preparation for surveillance testing when the licensee failed to implement existing procedural guidance for the control of clearances between installed scaffolding and plant equipment. Specifically, scaffolding was constructed too close to the Unit 2 containment spray suction isolation valve from the residual heat removal (RHR) heat exchanger interfering with the operation of the valve. The licensee entered this issue into its corrective action program for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, “Power Reactor Inspection Reports,” Appendix B, “Issue Screening,” dated December 24, 2009, because the finding was associated with the Barrier Integrity Cornerstone attribute of structures, systems, and components, and barrier performance, and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers, specifically the containment, would be able to protect the public from radionuclide releases caused by accidents or events. The finding has a cross-cutting aspect in the area of problem identification and resolution, trending, because the licensee did not assess information from the corrective action program in the aggregate to identify programmatic and common cause problems. Specifically, the licensee had identified similar issues of sufficient importance and quantity that if trended, had the potential to preclude the event. (P.1(b))

Inspection Report# : [2012002](#) (*pdf*)

Significance:  Sep 02, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Containment Spray Pipe Support Deficiencies

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” involving the licensee’s failure to ensure the Containment Spray Pipe Support 2S-249 and Containment Spray Pipe Anchor 2A-35 meet Seismic Category I requirements. This finding was entered into the licensee’s corrective action program.

The performance deficiency was determined to be more than minor because it was associated with the Barrier Integrity Cornerstone attribute of design control and adversely affected the cornerstone objective to provide reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. This finding is of very low safety significance (Green) because there was no actual barrier degradation. The inspectors did not identify a cross-cutting aspect associated with this finding because this was a legacy design issue; and therefore, was not reflective of current performance. (Section 40A5.1.b.(1))

Inspection Report# : [2011009](#) (*pdf*)

Significance:  Jun 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform An Operability Evaluation For Leakage Inside Containment

A finding of very low safety significance and an associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” was identified by the inspectors for the licensee’s failure to perform an operability evaluation of leakage inside containment when it was identified in September 2010. Specifically, on September 26, 2010, condition report AR01397092 identified increased leakage and a related work order was initiated to inspect Unit 1 containment for the leakage source; however, an evaluation of the leak and leak location/source was not performed as required by licensee procedures.

The finding was determined to be more than minor because it was associated with the Barrier Integrity Cornerstone attribute of structure, system, and component and barrier performance, and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers, specifically the containment, would be able to protect the public from radionuclide releases caused by accidents or events. The inspectors answered “No” to all of the questions in the Containment Barrier column of Table 4a of Inspection Manual Chapter 0609, “Significance Determination Process,” Attachment 0609.04, “Phase 1 - Initial Screening and Characterization of Findings”; therefore, the finding screened as very low safety significance. The finding has a cross-cutting aspect in the area of human performance, decision-making, because the licensee did not use conservative assumptions during the decision making and review process associated with the degraded condition (H.1(b)).

Emergency Preparedness

Occupational Radiation Safety

Significance:  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Determining An Individual's Dose Of Record With Discrepant TLD/ED Data Inputs

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 20.1201(c). Specifically, the licensee failed to accurately assess and assign the appropriate individual dose received on multiple (three) occasions in the first quarter 2010, given thermoluminescent dosimeter (TLD) to electronic dosimeter (ED) data mismatches. The issue was entered in the licensee's corrective action program as AR01730419. The licensee's immediate corrective actions included assigning the appropriate exposures to the involved individuals.

The finding was determined to be more than minor in accordance with IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," because it was associated with the program and process attribute of the Occupational Radiation Safety Cornerstone, and adversely affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation, in that not assigning an individual the appropriate dose received affected the licensee's ability to monitor, control, and limit radiation exposures. Specifically, the inspectors determined that the finding had very low safety significance (Green) because the finding did not involve: (1) as low as is reasonably achievable (ALARA) planning and controls; (2) a radiological overexposure; (3) there was not a substantial potential for an overexposure; and (4) there was no compromised ability to assess dose. This finding has a cross-cutting aspect in the area of human performance, work practices, specifically, that the licensee ensures the use of human error prevention techniques. (H.4(a))

Inspection Report# : [2012002](#) (pdf)

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : May 29, 2012

Point Beach 2

2Q/2012 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure To Incorporate Industry Operating Experience Into Preventive Maintenance Programs For Nuclear Instrumentation

A finding of very low safety significance and associated non-cited violation of 10 CFR 50.65(a)(3) was self-revealed when an unplanned reactor trip of Unit 2 occurred on June 13, 2011, as a result of the failure of a source range detector during low power physics testing. Specifically, the licensee failed to adequately evaluate operating experience and incorporate it into its preventive maintenance program to periodically replace aging electrical subcomponents in nuclear instrumentation systems and a subsequent age related failure resulted in initiating a plant transient. The licensee entered this issue into the corrective action program, and corrective actions to prevent recurrence were initiated.

The finding was determined to be more than minor in accordance with Inspection Manual Chapter 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because the finding was associated with the Initiating Events Cornerstone attribute of equipment performance. Specifically, the availability and reliability of the nuclear instruments was degraded to a point where an instrument failure caused a reactor trip, an event that adversely impacted the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. The finding has a cross-cutting aspect in the area of corrective action program, evaluation/extent of condition. Specifically, the licensee failed to thoroughly evaluate related nuclear instrument failure rates so that the resolutions addressed the causes and extent of conditions for age-related failures of electrical subcomponents. (Section 4OA3.4)

Inspection Report# : [2012003](#) (*pdf*)

Significance:  Sep 02, 2011

Identified By: NRC

Item Type: FIN Finding

Turbine Building Structural Steel Floor Beams Did Not Meet AISC Requirements

. The inspectors identified a finding of very low safety significance involving the licensee's failure to meet the requirements of the American Institute of Steel Construction (AISC) Specification. Specifically, the licensee's design basis calculation failed to ensure the turbine building structural steel floor beams met the AISC specification. This finding was entered into the licensee's corrective action program. No violation of NRC requirements was identified.

The performance deficiency was determined to be more than minor because the finding was associated with the Initiating Events Cornerstone attribute of design control and adversely affected the cornerstone objective to limit the likelihood of those events that upset the plant's stability and challenged critical safety functions during shutdown, as well as power operations. The finding screened as very low safety significance (Green), because the transient initiator would not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. This finding had a cross-cutting aspect in human performance and work practice because the licensee did not ensure effective supervisory and management oversight of work activities, including contractors, such that nuclear safety was supported. Specifically, the licensee failed to have adequate oversight of design calculation and documentation for establishing structural adequacy of the turbine building structural steel beams at EL. 44'-0." [H.2(c)] (Section 4OA5.1.b.(2))

Inspection Report# : [2011009](#) (*pdf*)

Mitigating Systems

Significance:  Jun 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Establish Emergency Diesel Generator Ventilation System Testing

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," because the licensee failed to establish routine testing procedure that demonstrated room temperatures would be maintained. Specifically, on March 29, 2012, the inspectors identified that the licensee failed to establish routine testing procedure that demonstrated the air flows for emergency diesel generators G-01 and G-02 ventilation systems would perform adequately to ensure that the room temperatures would be maintained. The licensee entered this issue into its corrective action program, and corrective actions included performance of air flow measurements on the fan units, creation of a preventive maintenance requirement for taking periodic flow measurements, and assessment of the identified issue through a condition evaluation.

The finding was determined to be more than minor in accordance with Inspection Manual Chapter 0612, Appendix B, "Issue Screening," dated December 24, 2009. The inspectors determined that this finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute for design control. Specifically, it adversely affected the Mitigating System Cornerstone objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. This finding has a cross-cutting aspect in the area of human performance, decision making. Specifically, the licensee did not use conservative assumptions regarding the verification of the proper air flow through the safety related gravity dampers in the emergency diesel generators G-01 and G-02 rooms. (Section 1R19)

Inspection Report# : [2012003](#) (*pdf*)

Significance:  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Follow Procedure And Implement Post-Maintenance Testing For Main Feedwater Regulating Valves Following EPU Modifications

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," because the licensee failed to follow work orders to properly configure and perform post maintenance testing (PMT) of the main feedwater regulating valve (MFRV) limit switches. As a result, the limit switches that provide an input into the anticipated transient without scram mitigation system actuation circuitry (AMSAC) were not tested. Specifically, on June 10, 2011, when engineering change EC 12054 for the MFRVs was partially turned over to and accepted by operations for Mode 2 and AMSAC was required to be functioning, the licensee failed to perform a PMT as required by plant procedures. The licensee entered this issue into its corrective action program for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because, if left uncorrected, the failure to perform PMT could lead to a more significant safety concern. Specifically, the failure to perform PMT of safety or risk related components prior to the operational condition for which the equipment was required could result in a latent failure that would only be discovered during a valid demand. This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee did not appropriately coordinate work activities by incorporating action to address the impact of changes to the activity on the plant and human performance. (H.3(b))

Inspection Report# : [2012002](#) (*pdf*)

Significance:  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform Operability Evaluations As Required By Procedure

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 50,

Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” for the licensee’s failure to perform an operability evaluation of the impact of door deficiencies on their ability to function as a high energy line break (HELB) barrier, fire (safe shutdown) door, and flood barrier. Specifically, the inspectors identified condition reports written between December 13, 2011, and March 8, 2012, for degraded doors credited as HELB barriers, safe shutdown doors, and flood barriers; however, the licensee failed to perform an operability evaluation of the conditions as required by plant procedures. The licensee entered this issue into its corrective action program for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, “Power Reactor Inspection Reports,” Appendix B, “Issue Screening,” dated December 24, 2009, because, if left uncorrected, the failure to perform operability evaluations and recognize conditions that could render equipment inoperable could lead to a more significant safety concern. The finding has a cross-cutting aspect in the area of problem identification and resolution, corrective action, because the licensee failed to take appropriate action to address safety issues and adverse trends in a timely manner. Although the licensee had previously recognized this and initiated training to correct the knowledge based aspects of the issue, there were no interim barriers in place during the long duration needed to complete the training activity. (P.1(d))

Inspection Report# : [2012002](#) (pdf)

Significance:  Sep 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform An Operability Evaluation For Rod Drive Control System Failures

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” for the licensee’s failure to perform an operability evaluation as required by procedure when degraded/non conforming conditions were identified during a surveillance of the rod drive control system. Specifically, on December 10, 2010, the licensee documented rod trouble alarms in condition report 01401564, but did not identify the degraded/non conforming condition or evaluate the condition relative to support functions for technical specifications (TSs) 3.1.4 and 3.1.6. The licensee entered this issue into its corrective action program for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, “Power Reactor Inspection Reports,” Appendix B, “Issue Screening,” dated December 24, 2009, because it was associated with the Mitigating Systems Cornerstone attribute of equipment performance and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the failure to identify the degraded/non conforming condition and assess the impact on operations and TS requirements resulted in latent conditions that had the potential to be of greater safety significance, and in this case resulted in the failure to evaluate the degraded/non conforming condition relative to TSs 3.1.4 and 3.1.6. This finding has a cross-cutting aspect in the area of human performance, decision-making, because the licensee did not use conservative assumptions during related decision making that adopted a requirement to demonstrate that the proposed action was safe in order to proceed (H.1(b)).

Inspection Report# : [2011004](#) (pdf)

Significance:  Sep 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Ensure Tornado Missile Protection For EDGs G01 And G02 Exhaust Stacks

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” involving the licensee’s failure to ensure tornado missile protection for two of the emergency diesel generator (EDG) exhaust stacks, which were considered Class I components. The licensee entered this issue into the Corrective Action Program as AR 01678709.

The licensee’s failure to ensure tornado missile protection for EDGs G01 and G02 exhaust stacks was a performance deficiency. The performance deficiency was determined to be more than minor because there was reasonable doubt

the EDG exhaust stacks would remain functional to support EDG operation in the event tornado-induced missiles damaged the exhaust stacks. The finding screened as very low safety significance because the finding was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. This finding was determined not to have a cross-cutting aspect.

Inspection Report# : [2011004](#) (*pdf*)

Significance:  Sep 02, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Monitor Outside Air Temperature

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," involving the licensee's failure to correctly translate design basis assumptions into procedures or instructions. Specifically, the licensee failed to monitor average outside air temperature which was one of the design input criteria for the temperature heat-up calculation associated with rooms which housed safety-related equipment. This finding was entered into the licensee's corrective action program.

The performance deficiency was associated with Mitigating System Cornerstone and determined to be more than minor because, if left uncorrected, it could lead to a more significant safety concern. The finding screened as very low safety significance (Green) because the finding was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding had a cross-cutting aspect in the area of human performance, resources because the licensee did not ensure adequate training and qualification of personnel. Specifically, the licensee failed to adequately train licensed operators to ensure adequate knowledge with respect to the interface between functionality of a non-safety system component and the impact of a failure on the operability of safety-related equipment. [H.2(b)]. (Section 1R21.3.b.(1))

Inspection Report# : [2011009](#) (*pdf*)

Significance:  Sep 02, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Incorporate Minimum AFW Flow Requirement Into Emergency Procedures

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure to ensure a minimum AFW flow of 275 gpm as specified in the accident analysis for the Loss of Normal Feedwater event. This finding was entered into the licensee's corrective action program.

The performance deficiency was associated with the Mitigating Systems Cornerstone attribute of design control and was determined to be more than minor because, if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, an AFW flow rate of less than 275 gpm as specified in the procedures did not ensure the pressurizer would not become water solid and cause an over-pressure condition within the Reactor Coolant System during the Loss of Normal Feedwater. The finding screened as of very low safety significance (Green) because the finding was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk-significant due to a seismic, flooding, or severe weather initiating event. This finding had a cross-cutting aspect in the area of human performance, resources because the licensee did not maintain design documentation in a complete and accurate manner. Specifically, the licensee failed to maintain Emergency Procedures consistent with the design basis analysis for LONF. [H.2(c)]. (Section 1R21.6.b.(1))

Inspection Report# : [2011009](#) (*pdf*)

G**Significance:** Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Scaffold Construction Interferes With The Operation Of Containment Spray Suction Valve

A finding of very low safety significance and a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," were self revealed during the preparation for surveillance testing when the licensee failed to implement existing procedural guidance for the control of clearances between installed scaffolding and plant equipment. Specifically, scaffolding was constructed too close to the Unit 2 containment spray suction isolation valve from the residual heat removal (RHR) heat exchanger interfering with the operation of the valve. The licensee entered this issue into its corrective action program for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because the finding was associated with the Barrier Integrity Cornerstone attribute of structures, systems, and components, and barrier performance, and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers, specifically the containment, would be able to protect the public from radionuclide releases caused by accidents or events. The finding has a cross-cutting aspect in the area of problem identification and resolution, trending, because the licensee did not assess information from the corrective action program in the aggregate to identify programmatic and common cause problems. Specifically, the licensee had identified similar issues of sufficient importance and quantity that if trended, had the potential to preclude the event. (P.1(b))

Inspection Report# : [2012002](#) (pdf)**G****Significance:** Sep 02, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Containment Spray Pipe Support Deficiencies

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," involving the licensee's failure to ensure the Containment Spray Pipe Support 2S-249 and Containment Spray Pipe Anchor 2A-35 meet Seismic Category I requirements. This finding was entered into the licensee's corrective action program.

The performance deficiency was determined to be more than minor because it was associated with the Barrier Integrity Cornerstone attribute of design control and adversely affected the cornerstone objective to provide reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. This finding is of very low safety significance (Green) because there was no actual barrier degradation. The inspectors did not identify a cross-cutting aspect associated with this finding because this was a legacy design issue; and therefore, was not reflective of current performance. (Section 40A5.1.b.(1))

Inspection Report# : [2011009](#) (pdf)

Emergency Preparedness

W**Significance:** Apr 20, 2012

Identified By: NRC

Item Type: AV Apparent Violation

Protective Action Recommendation Weakness

An NRC identified finding with a preliminary low to moderate safety significance and one associated apparent violation of 10 CFR 50.47(b)(10) for failure to develop and put into place guidelines for the choice of protective actions during an emergency that were consistent with Federal guidance. Federal guidance for the choice of protective actions during an emergency is described in EPA 400 R 92 001, and states, in part, that withdrawal of protective actions from areas where they have already been implemented is usually not advisable during the early phase because

of the potential for confusion and possibly impede implementation of protective actions which could place the public at additional risk. Additionally, Federal guidance described in NUREG 0654/FEMA REP 1, Supplement 3, states, in part, licensees should not relax protective actions until the source of the threat is under control. In the case of a known impediment to evacuation, the licensee's emergency implementing procedure, EPIP 1.3, "Dose Assessment and Protective Action Recommendations," incorrectly directed key decision makers to withdraw protective actions to evacuate the public and replace it with a recommendation to shelter the public. After the NRC identified the finding, the licensee immediately revised its emergency implementing procedure to be consistent with Federal guidance.

This finding is more than minor because it affected the Emergency Preparedness Cornerstone objective of implementing adequate measures to protect the health and safety of the public during a radiological emergency, and is associated with the cornerstone attributes of emergency response organization performance and procedure quality. Specifically, the withdrawal of implemented protective actions could cause confusion of offsite authorities and the public. The inspectors evaluated the finding using the SDP and determined this finding screened as preliminarily White. The finding has a cross cutting aspect in the area of Human Performance, Resources, because the licensee failed to maintain complete, accurate, and up to date procedures as early as 2003 when the licensee returned sheltering to its range of protective action recommendation emergency plans and procedures.

Inspection Report# : [2012503](#) (pdf)

Occupational Radiation Safety

Significance:  Jun 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Compliance With 10 CFR 20.1701 To Control The Concentration Of Radioactive Material In Air And Ensure That Radiological Airborne Hazards Would Be Minimized In TSC During Design-Based Accident

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR 20.1701. Specifically, the inspectors identified deficiencies, as of January 19, 2012, in the licensee's testing program for assuring that the technical support center (TSC) ventilation system was in compliance with the system's design basis. The licensee's TSC high efficiency particulate air and charcoal filter efficiencies were not tested to the design criteria. The licensee documented this issue in its corrective action program and the corrective actions included revising applicable procedures. In addition, the licensee performed a calculation to show that the TSC ventilation system was capable of maintaining a radiological habitability of less than 5 Rem total effective dose equivalent for the duration of the design base accidents. The calculation was based on actual historical filter testing efficiencies.

The finding was more than minor because it was associated with the program and process attribute of exposure control of the Occupational Radiation Safety Cornerstone and adversely affected the cornerstone objective of ensuring the adequate protection of worker health and safety from exposure radiation and radioactive material. Specifically, inappropriately testing installed emergency ventilation system filters designed to mitigate workers' radiation exposures did not validate that the TSC ventilation system was capable of performing its intended design function of minimizing worker exposures to airborne radioactive materials. The finding was assessed using the occupational radiation safety significance determination process and was determined to be of very low safety significance (Green) because it was not an as-low-as-is-reasonable-achievable planning issue, there was no overexposure or potential for overexposure, and the licensee's ability to assess dose was not compromised. The inspectors determined that the most significant contributor to the finding was a cross-cutting aspect in the area of human performance, resources. Specifically, the licensee failed to ensure that the TSC ventilation filter testing protocol assured compliance to the system's designed margins. (Section 2RS3)

Inspection Report# : [2012003](#) (pdf)

Significance:  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Determining An Individual's Dose Of Record With Discrepant TLD/ED Data Inputs

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 20.1201(c). Specifically, the licensee failed to accurately assess and assign the appropriate individual dose received on multiple (three) occasions in the first quarter 2010, given thermoluminescent dosimeter (TLD) to electronic dosimeter (ED) data mismatches. The issue was entered in the licensee's corrective action program as AR01730419. The licensee's immediate corrective actions included assigning the appropriate exposures to the involved individuals.

The finding was determined to be more than minor in accordance with IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," because it was associated with the program and process attribute of the Occupational Radiation Safety Cornerstone, and adversely affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation, in that not assigning an individual the appropriate dose received affected the licensee's ability to monitor, control, and limit radiation exposures. Specifically, the inspectors determined that the finding had very low safety significance (Green) because the finding did not involve: (1) as low as is reasonably achievable (ALARA) planning and controls; (2) a radiological overexposure; (3) there was not a substantial potential for an overexposure; and (4) there was no compromised ability to assess dose. This finding has a cross-cutting aspect in the area of human performance, work practices, specifically, that the licensee ensures the use of human error prevention techniques. (H.4(a))

Inspection Report# : [2012002](#) (*pdf*)

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : September 12, 2012

Point Beach 2

3Q/2012 Plant Inspection Findings

Initiating Events

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: FIN Finding

Failure to Adequately Control Materials Classified As High Winds/Tornado Hazards

The inspectors identified a finding of very low safety significance for the licensee's failure to maintain control over the proper storage and placement of materials that were classified as high winds/tornado hazards, within the risk significant areas of the outdoors protected area, in accordance with station procedure NP 1.9.6, "Plant Cleanliness and Storage." Specifically, the inspectors identified unsecured material on wood pallets near the station transformers 1X-04 and 2X-04, which provided offsite power to both units. The licensee took immediate corrective action to remove the material. The issue was entered into the licensee's corrective action program for resolution as action request AR01788119 for evaluation and development of additional corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Initiating Events Cornerstone attribute of equipment performance and adversely affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Additionally, if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, the loose material could have affected offsite power during periods of high winds. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 1 for the Initiating Events Cornerstone, dated June 19, 2012. The inspectors answered "No" to the Exhibit 1 questions in Appendix A for transient initiators and support system initiators. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work practices, because licensee personnel did not appropriately plan work activities by incorporating job site conditions, including environmental conditions, which might have impacted plant structures, systems, and components (H.3(a)).

Inspection Report# : [2012004](#) (*pdf*)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Plant Operation With An Unacceptable ASME Code Class 2 Pressure Boundary Flaw

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR 50.55a(g)(4) because the licensee failed to identify and evaluate an American Society of Mechanical Engineers (ASME) Code Class pressure boundary flaw. Specifically, between May 22 and June 26, 2012, the licensee did not identify that leakage in the Unit 2 containment from an unknown source was from a weld in the steam generator A blowdown line, an ASME Section XI Code Class 2 high energy component. The issue was entered into the licensee's corrective action program as action requests AR01789202 and AR01797798 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Initiating Events Cornerstone attribute of equipment performance and adversely affected the reliability of the steam generation systems (steam generator, feedwater, or main steam); thereby, directly impacting the cornerstone objective to limit the likelihood of events that upset plant stability during power operations. Specifically, the inspectors determined that any potential (and subsequently actual) failure location represented both a containment barrier during a loss of coolant accident and a reactor pressure system boundary during a steam generator tube failure event, in addition to being a potential transient initiator if the leakage became more significant. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 1 for the Initiating Events Cornerstone, dated June 19, 2012. The inspectors answered "No" to the Exhibit 1 questions in Appendix A for transient initiators and support system initiators. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, conservative assumptions. Specifically, the licensee failed to use conservative assumptions in decision making because it developed an operability evaluation demonstrating that continued full power operation was acceptable without reasonable assurance that the leakage was from a mechanical joint, rather than developing reasonable assurance or providing physical evidence, either indirectly or by observation, that the leakage was not pressure boundary leakage (H.1(b)).

Inspection Report# : [2012004](#) (pdf)

Significance: G Jun 30, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure To Incorporate Industry Operating Experience Into Preventive Maintenance Programs For Nuclear Instrumentation

A finding of very low safety significance and associated non-cited violation of 10 CFR 50.65(a)(3) was self-revealed when an unplanned reactor trip of Unit 2 occurred on June 13, 2011, as a result of the failure of a source range detector during low power physics testing. Specifically, the licensee failed to adequately evaluate operating experience and incorporate it into its preventive maintenance program to periodically replace aging electrical subcomponents in nuclear instrumentation systems and a subsequent age related failure resulted in initiating a plant transient. The licensee entered this issue into the corrective action program, and corrective actions to prevent recurrence were initiated.

The finding was determined to be more than minor in accordance with Inspection Manual Chapter 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because the finding was associated with the Initiating Events Cornerstone attribute of equipment performance. Specifically, the availability and reliability of the nuclear instruments was degraded to a point where an instrument failure caused a reactor trip, an event that adversely impacted the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. The finding has a cross-cutting aspect in the area of corrective action program, evaluation/extent of condition. Specifically, the licensee failed to thoroughly evaluate related nuclear instrument failure rates so that the resolutions addressed the causes and extent of conditions for age-related failures of electrical subcomponents. (Section 4OA3.4)

Inspection Report# : [2012003](#) (pdf)

Mitigating Systems

Significance: G Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Implement Risk Management Actions During Various Emergent Work Activities

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR 50.65 (a)(4) because the licensee failed to properly manage and assess risk for various emergent work activities.

Specifically, the licensee failed to manage the risk associated with the gas turbine generator (G-05) failure out of service duration, the G-05 unavailability when on the turning gear, and the Unit 1 turbine electrohydraulic control (EHC) system in manual. The issue was entered into the licensee's corrective action program as action requests AR01808661 and AR01787706 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because the failure to properly manage and assess risk, if left uncorrected, would have the potential to become a more significant safety concern. Specifically, the inspectors determined that the addition of a Unit 1 transient initiator and of G-05 modeled as out of service into the licensee's safety monitor program for risk was more than minor because the licensee's risk assessment was based on incorrect assumptions that changed the outcome of the assessment. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix K, "Maintenance Risk Assessment And Risk Management Significance Determination Process," dated May 19, 2005. The inspectors determined that the finding was a mitigating systems contributor, evaluated the risk deficit for each instance, and found that the issue screened as having very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to define and effectively communicate expectations regarding procedural compliance and ensure personnel follow procedures. Specifically, in all instances the licensee failed to communicate expectations regarding compliance as required by station nuclear procedure (NP) 1.1.4, and ensure personnel followed implementing procedure NP 10.3.7, for risk management (H.4(b)).

Inspection Report# : [2012004](#) (*pdf*)

Significance: G Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Weld Design Deficiency In Emergency Diesel Generator Missile Protection Barriers

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for a deficiency in weld evaluations in the licensee design calculation of the new missile protection steel barriers. These barriers were installed for protection of the emergency diesel generators G-01 and G-02 exhaust pipes from a tornado missile strike. Specifically, the inspectors identified two examples where critical welds were not adequately addressed in the calculation. The issue was entered into the licensee's corrective action program as action requests AR01771762 and AR01772431 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," and Appendix E, "Example of Minor Issues," dated August 11, 2009, and found that it was similar to Example 3a and it was associated with the Mitigating Systems Cornerstone attribute of Design Control and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 1 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "Yes" to

Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to ensure supervisory oversight of the contractor activities to support nuclear safety. Specifically, in the examples noted, the licensee failed to adequately review the calculation performed by the contractor to verify that the assumptions and engineering judgments were adequately justified and consistent with the installation (H.4(c)).

Inspection Report# : [2012004](#) (*pdf*)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Transient Materials Not Removed From Containment Prior To Reactor Startup

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to remove a plastic bag of transient materials that could interact with the containment sump recirculation strainer. Specifically, while performing the containment closure inspection prior to reactor startup, the inspectors identified a large plastic bag containing mop heads and cleaning materials that, if left in containment, could interact with the containment recirculation sump suction strainer. The licensee took immediate corrective action to remove the items from containment. The issue was entered into the licensee's corrective action program for resolution as action requests AR01781331 and AR01808631 for evaluation and development of additional corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating System Cornerstone attribute of equipment performance and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the low head safety injection system availability and reliability could be reduced by material clogging the recirculation sump suction strainer. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 2 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "Yes" to Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. Therefore, inspectors determined the finding to be of very low safety significance. The finding did not have a cross-cutting aspect because the cause was identical to the cause for the boric acid not being removed from containment isolation valve 2SC-955, as required by procedure, an issue also identified during the inspection, and the cross cutting aspect was captured by that issue.

Inspection Report# : [2012004](#) (*pdf*)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Incorporate WOG ERG, Revision 2, Into The EOPs

The inspectors identified a finding of very low safety significance and associated non-cited violation of Technical Specification 5.4, "Procedures." Specifically, the licensee failed to maintain its emergency operating procedures (EOPs) with the safety significant changes provided in the Westinghouse Owners Group Emergency Response Guidelines (WOG ERGs), Revision 2. The issue was entered in the licensee's corrective action program as action request AR01779635 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating

Systems Cornerstone attribute of procedure quality and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the inspectors determined that the failure to update EOPs to implement Revision 2 of the WOG ERGs significantly beyond the current industry standard of two years would result in a delay when terminating Primary To Secondary Leakage during a steam generator tube rupture event. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 2 for the the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "Yes" to Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, resources, because the licensee failed to assure resources were available and adequate to complete the WOG ERG, Revision 2 EOP updates in a timely manner commensurate with risk and safety (H.2(c)).

Inspection Report# : [2012004](#) (pdf)

Significance: G Jun 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Establish Emergency Diesel Generator Ventilation System Testing

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," because the licensee failed to establish routine testing procedure that demonstrated room temperatures would be maintained. Specifically, on March 29, 2012, the inspectors identified that the licensee failed to establish routine testing procedure that demonstrated the air flows for emergency diesel generators G-01 and G-02 ventilation systems would perform adequately to ensure that the room temperatures would be maintained. The licensee entered this issue into its corrective action program, and corrective actions included performance of air flow measurements on the fan units, creation of a preventive maintenance requirement for taking periodic flow measurements, and assessment of the identified issue through a condition evaluation.

The finding was determined to be more than minor in accordance with Inspection Manual Chapter 0612, Appendix B, "Issue Screening," dated December 24, 2009. The inspectors determined that this finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute for design control. Specifically, it adversely affected the Mitigating System Cornerstone objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. This finding has a cross-cutting aspect in the area of human performance, decision making. Specifically, the licensee did not use conservative assumptions regarding the verification of the proper air flow through the safety related gravity dampers in the emergency diesel generators G-01 and G-02 rooms. (Section 1R19)

Inspection Report# : [2012003](#) (pdf)

Significance: G Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Follow Procedure And Implement Post-Maintenance Testing For Main Feedwater Regulating Valves Following EPU Modifications

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," because the licensee failed to follow work orders to properly configure and perform post maintenance testing (PMT) of the main feedwater regulating valve (MFRV) limit switches. As a result, the limit switches that provide an input into the anticipated transient without scram mitigation system actuation circuitry (AMSAC) were not tested. Specifically, on June 10, 2011, when engineering change EC 12054 for the MFRVs was partially turned over to and accepted by operations for Mode 2 and

AMSAC was required to be functioning, the licensee failed to perform a PMT as required by plant procedures. The licensee entered this issue into its corrective action program for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because, if left uncorrected, the failure to perform PMT could lead to a more significant safety concern. Specifically, the failure to perform PMT of safety or risk related components prior to the operational condition for which the equipment was required could result in a latent failure that would only be discovered during a valid demand. This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee did not appropriately coordinate work activities by incorporating action to address the impact of changes to the activity on the plant and human performance. (H.3(b))
Inspection Report# : [2012002](#) (*pdf*)

Significance:  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform Operability Evaluations As Required By Procedure

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to perform an operability evaluation of the impact of door deficiencies on their ability to function as a high energy line break (HELB) barrier, fire (safe shutdown) door, and flood barrier. Specifically, the inspectors identified condition reports written between December 13, 2011, and March 8, 2012, for degraded doors credited as HELB barriers, safe shutdown doors, and flood barriers; however, the licensee failed to perform an operability evaluation of the conditions as required by plant procedures. The licensee entered this issue into its corrective action program for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because, if left uncorrected, the failure to perform operability evaluations and recognize conditions that could render equipment inoperable could lead to a more significant safety concern. The finding has a cross-cutting aspect in the area of problem identification and resolution, corrective action, because the licensee failed to take appropriate action to address safety issues and adverse trends in a timely manner. Although the licensee had previously recognized this and initiated training to correct the knowledge based aspects of the issue, there were no interim barriers in place during the long duration needed to complete the training activity. (P.1(d))

Inspection Report# : [2012002](#) (*pdf*)

Barrier Integrity

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Boric Acid Not Removed From Containment Isolation Valve As Required by Procedure

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to clean boric acid from the Unit 2 reactor coolant system hot leg sample isolation valve 2SC-955. Specifically, during the containment closeout tour performed by the inspectors, the inspectors identified that boric acid leakage on valve 2SC-955 had not been cleaned as required by the boric acid program. The licensee subsequently cleaned the valve prior to restart of the

reactor and entered the issue into its corrective action program for resolution as action requests AR01782290, AR01765986, AR01780951, and AR01797802, for evaluation and development of additional corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Barrier Integrity Cornerstone attribute of reactor coolant system equipment and barrier performance and adversely affected the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Additionally, if left uncorrected, it could impact the operators' ability to verify a containment isolation actuation, thereby adversely affecting the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 2 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "Yes" to Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, systematic processes, because the licensee failed to use a systematic process when making decisions related to the cleaning of boric acid components during the unplanned shutdown. Specifically, the licensee's communications and interfaces for performing the activities and developing corrective actions were not approached rigorously and systematically when the duration of the unplanned outage was significantly shortened, and plant startup timelines modified the expected boric acid cleaning plans (H.1(a)).

Inspection Report# : [2012004](#) (pdf)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedural Guidance For Heavy Loads Operations

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to have adequate procedures in place to ensure that heavy loads were operated safely within the primary auxiliary building (PAB). Specifically, the inspectors determined that the licensee failed to incorporate minimum crane operating temperature limits into procedures to avoid brittle fracture of structural components below the nil-ductility transition temperature. The issue was entered into the licensee's corrective action program for resolution as action request AR01783306 for evaluation and development of corrective actions which included revising procedures to identify the minimum operating temperature of the PAB crane.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Barrier Integrity Cornerstone attribute of procedure quality and adversely affected the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events because a PAB crane heavy load drop could cause damage to spent fuel. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 3 for the Barrier Integrity Cornerstone, dated June 19, 2012. The inspectors answered "No" to Exhibit 3 questions in Appendix A for the spent fuel pool. Therefore, the inspectors determined the finding to be of very low safety significance. In accordance with IMC 0612, Section 06.03.c, a cross-cutting aspect will not be assigned to this finding as it has occurred outside of the nominal three-year period and is not representative of present performance.

Inspection Report# : [2012004](#) (pdf)

Significance: **G** Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Scaffold Construction Interferes With The Operation Of Containment Spray Suction Valve

A finding of very low safety significance and a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," were self revealed during the preparation for surveillance testing when the licensee failed to implement existing procedural guidance for the control of clearances between installed scaffolding and plant equipment. Specifically, scaffolding was constructed too close to the Unit 2 containment spray suction isolation valve from the residual heat removal (RHR) heat exchanger interfering with the operation of the valve. The licensee entered this issue into its corrective action program for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because the finding was associated with the Barrier Integrity Cornerstone attribute of structures, systems, and components, and barrier performance, and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers, specifically the containment, would be able to protect the public from radionuclide releases caused by accidents or events. The finding has a cross-cutting aspect in the area of problem identification and resolution, trending, because the licensee did not assess information from the corrective action program in the aggregate to identify programmatic and common cause problems. Specifically, the licensee had identified similar issues of sufficient importance and quantity that if trended, had the potential to preclude the event. (P.1(b))

Inspection Report# : [2012002](#) (*pdf*)

Emergency Preparedness

Significance: **W** Apr 20, 2012

Identified By: NRC

Item Type: FIN Finding

Protective Action Recommendation Weakness

An NRC identified finding with a preliminary low to moderate safety significance and one associated apparent violation of 10 CFR 50.47(b)(10) for failure to develop and put into place guidelines for the choice of protective actions during an emergency that were consistent with Federal guidance. Federal guidance for the choice of protective actions during an emergency is described in EPA 400 R 92 001, and states, in part, that withdrawal of protective actions from areas where they have already been implemented is usually not advisable during the early phase because of the potential for confusion and possibly impede implementation of protective actions which could place the public at additional risk. Additionally, Federal guidance described in NUREG 0654/FEMA REP 1, Supplement 3, states, in part, licensees should not relax protective actions until the source of the threat is under control. In the case of a known impediment to evacuation, the licensee's emergency implementing procedure, EPIP 1.3, "Dose Assessment and Protective Action Recommendations," incorrectly directed key decision makers to withdraw protective actions to evacuate the public and replace it with a recommendation to shelter the public. After the NRC identified the finding, the licensee immediately revised its emergency implementing procedure to be consistent with Federal guidance.

This finding is more than minor because it affected the Emergency Preparedness Cornerstone objective of implementing adequate measures to protect the health and safety of the public during a radiological emergency, and is associated with the cornerstone attributes of emergency response organization performance and procedure quality. Specifically, the withdrawal of implemented protective actions could cause confusion of offsite authorities and the public. The inspectors evaluated the finding using the SDP and determined this finding screened as preliminarily White. The finding has a cross cutting aspect in the area of Human Performance, Resources, because the licensee

failed to maintain complete, accurate, and up to date procedures as early as 2003 when the licensee returned sheltering to its range of protective action recommendation emergency plans and procedures.

Inspection Report# : [2012503](#) (*pdf*)

Inspection Report# : [2012504](#) (*pdf*)

Occupational Radiation Safety

Significance:  Jun 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Compliance With 10 CFR 20.1701 To Control The Concentration Of Radioactive Material In Air And Ensure That Radiological Airborne Hazards Would Be Minimized In TSC During Design-Based Accident

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR 20.1701. Specifically, the inspectors identified deficiencies, as of January 19, 2012, in the licensee's testing program for assuring that the technical support center (TSC) ventilation system was in compliance with the system's design basis. The licensee's TSC high efficiency particulate air and charcoal filter efficiencies were not tested to the design criteria. The licensee documented this issue in its corrective action program and the corrective actions included revising applicable procedures. In addition, the licensee performed a calculation to show that the TSC ventilation system was capable of maintaining a radiological habitability of less than 5 Rem total effective dose equivalent for the duration of the design base accidents. The calculation was based on actual historical filter testing efficiencies.

The finding was more than minor because it was associated with the program and process attribute of exposure control of the Occupational Radiation Safety Cornerstone and adversely affected the cornerstone objective of ensuring the adequate protection of worker health and safety from exposure radiation and radioactive material. Specifically, inappropriately testing installed emergency ventilation system filters designed to mitigate workers' radiation exposures did not validate that the TSC ventilation system was capable of performing its intended design function of minimizing worker exposures to airborne radioactive materials. The finding was assessed using the occupational radiation safety significance determination process and was determined to be of very low safety significance (Green) because it was not an as-low-as-is-reasonable-achievable planning issue, there was no overexposure or potential for overexposure, and the licensee's ability to assess dose was not compromised. The inspectors determined that the most significant contributor to the finding was a cross-cutting aspect in the area of human performance, resources. Specifically, the licensee failed to ensure that the TSC ventilation filter testing protocol assured compliance to the system's designed margins. (Section 2RS3)

Inspection Report# : [2012003](#) (*pdf*)

Significance:  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Determining An Individual's Dose Of Record With Discrepant TLD/ED Data Inputs

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 20.1201(c). Specifically, the licensee failed to accurately assess and assign the appropriate individual dose received on multiple (three) occasions in the first quarter 2010, given thermoluminescent dosimeter (TLD) to electronic dosimeter (ED) data mismatches. The issue was entered in the licensee's corrective action program as AR01730419. The licensee's immediate corrective actions included assigning the appropriate exposures to the involved individuals.

The finding was determined to be more than minor in accordance with IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," because it was associated with the program and process attribute of the Occupational Radiation Safety Cornerstone, and adversely affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation, in that not assigning an individual the appropriate dose received affected the licensee's ability to monitor, control, and limit radiation exposures. Specifically, the inspectors determined that the finding had very low safety significance (Green) because the finding did not involve: (1) as low as is reasonably achievable (ALARA) planning and controls; (2) a radiological overexposure; (3) there was not a substantial potential for an overexposure; and (4) there was no compromised ability to assess dose. This finding has a cross-cutting aspect in the area of human performance, work practices, specifically, that the licensee ensures the use of human error prevention techniques. (H.4(a))
Inspection Report# : [2012002](#) (*pdf*)

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Manager Working Outage Hours Contrary To Guidance

The inspectors identified a Severity Level IV non-cited violation and associated finding of very low safety significance of 10 CFR 26.207(a), "Waivers," for the licensee's failure to perform multiple activities as required when licensed reactor operators in the shift manager (SM) position worked outage hours during the Unit 1 outage in fall 2011. Specifically, for each circumstance where an SM exceeded operating hours, the licensee did not meet the following requirements: a determination that the waiver is necessary to mitigate or prevent a condition adverse to safety; a face to face assessment of the individual to determine that there was reasonable assurance that the individual would be able to safely and competently perform his or her duties during the additional work period for which the waiver will be granted; and a circumstance did not exist that could not have been reasonably controlled because additional personnel could have been added to the shift to perform the related outage activities. The issue was entered into the licensee's corrective action program for resolution as action request AR01797782, for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because if left uncorrected, the exclusion of workers from work hour controls could have led to a more significant safety concern due to personnel exceeding work hour limits while performing safety related or risk significant activities. Specifically, without proper fatigue assessments, incorrect assessment or directions could be provided by the SM for routine activities or during transient/emergency response. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix M, "Significance Determination Process Using Qualitative Criteria," dated April 12, 2012. The inspectors determined that the finding was of very low safety significance because no deficiencies which affected risk significant structures, systems, or components occurred as a result of SM fatigue. This finding has a cross-cutting aspect in the area of problem identification and resolution, self and independent assessment, because the licensee failed to conduct sufficient in-depth self assessments. Specifically, the licensee conducted a self assessment of the fatigue rule annually with its corporate licensing department giving the licensee the prior opportunity to identify and correct this issue had the self assessments been more rigorous (P.3(a)).

Inspection Report# : [2012004](#) (*pdf*)

Significance: N/A Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform Adequate Evaluations To Ensure Compliance With 10 CFR 72.212(b)(6) And 10 CFR 72.122(b)(2)(i)

The inspectors identified a Severity Level IV non-cited violation of 10 CFR 72.146, "Design Control," for the licensee's failure to perform adequate evaluations to ensure compliance with 10 CFR 72.122(b)(2)(i) and 10 CFR 72.212(b)(6). Specifically, the inspectors identified that the licensee failed to evaluate that the reactor site parameters, including analyses of earthquakes, were enveloped by the transfer cask design basis. The issue was entered into the licensee's corrective action program for resolution as action request AR01780357, for evaluation and development of corrective actions.

The violation was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," and Appendix E, "Example of Minor Issues," dated August 11, 2009, and found that it was similar to Example 3i. Specifically, the licensee's lack of evaluation did not assure cask integrity during a design basis earthquake and an additional calculation was required to evaluate the effects of the design basis earthquake during dry shielded canister processing operations in the primary auxiliary building on the cask decontamination stand in accordance with the Independent Spent Fuel Storage Installation (ISFSI) licensing/design basis analysis requirements. Consistent with the guidance in the NRC Enforcement Manual, Section 2.6.D, if a violation does not fit an example in the enforcement policy violation examples, it should be assigned a severity level: (1) commensurate with its safety significance; and, (2) informed by similar violations addressed in the Violation Examples. Therefore, the inspectors determined violation screened as having very low safety significance (Severity Level IV). Specifically, following the inspection inquiry the licensee revised their calculations and determined that overturning and sliding of the transfer cask in the primary auxiliary building on the cask decontamination stand and in the spent fuel pool would not occur during the design basis earthquake. In accordance with Section 2.2 of the NRC Enforcement Policy, ISFSIs are not subject to the Significance Determination Process (SDP) and, thus, traditional enforcement will be used for these facilities and thus a cross-cutting aspect is not assigned to this violation. In accordance with Section 2.2 of the NRC Enforcement Policy, ISFSIs are not subject to the SDP and, thus, traditional enforcement will be used for these facilities and thus a cross-cutting aspect is not assigned to this violation.

Inspection Report# : [2012004](#) (*pdf*)

Last modified : November 30, 2012

Point Beach 2

4Q/2012 Plant Inspection Findings

Initiating Events

Significance:  Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Unauthorized Transient Combustibles

The inspectors identified a finding of very low safety significance and associated non-cited violation of Technical Specification 5.4.1.h for Units 1 and 2 for the licensee's failure to control transient combustible materials in accordance with the fire protection program requirements. Specifically, the licensee failed to implement the guidelines specified in Procedure NP 1.9.9, "Transient Combustible Control," when they installed an energized extension cord (combustible material) for temporary lighting in a combustible exclusion area located in fire zone 151. Upon discovery, the licensee relocated the extension cord and placed the issue into their corrective action program as action request AR01811414.

The inspectors determined that this finding was more than minor in accordance with IMC 0612, Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Initiating Events cornerstone attribute of Protection Against External Factors (Fire) and adversely affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during plant operations. Specifically, the inspectors determined that the routing of the energized extension cord in the CS pumps area could potentially affect both redundant trains of the charging pumps located in the area; and that the transient combustible materials were routed in a combustible free zone required for separation of redundant trains because the extension cord was installed in a combustible free zone separating redundant trains required for safe shutdown. The inspectors evaluated the finding using IMC 0612, Appendix E, "Example of Minor Issues," dated August 11, 2009, and found that it was similar to Example 4.k. This finding was of very low safety significance because the installation of the extension cord represented a low degradation against the combustible controls program. The finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to coordinate the approval of a transient combustible control form with the fire protection engineer prior to routing the extension cord thru the containment spray pumps area. (H.3(b))

Inspection Report# : [2012005](#) (*pdf*)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: FIN Finding

Failure to Adequately Control Materials Classified As High Winds/Tornado Hazards

The inspectors identified a finding of very low safety significance for the licensee's failure to maintain control over the proper storage and placement of materials that were classified as high winds/tornado hazards, within the risk significant areas of the outdoors protected area, in accordance with station procedure NP 1.9.6, "Plant Cleanliness and Storage." Specifically, the inspectors identified unsecured material on wood pallets near the station transformers 1X-04 and 2X-04, which provided offsite power to both units. The licensee took immediate corrective action to remove the material. The issue was entered into the licensee's corrective action program for resolution as action request AR01788119 for evaluation and development of additional corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Initiating Events Cornerstone attribute of equipment performance and adversely affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Additionally, if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, the loose material could have affected offsite power during periods of high winds. The

inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 1 for the Initiating Events Cornerstone, dated June 19, 2012. The inspectors answered "No" to the Exhibit 1 questions in Appendix A for transient initiators and support system initiators. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work practices, because licensee personnel did not appropriately plan work activities by incorporating job site conditions, including environmental conditions, which might have impacted plant structures, systems, and components (H.3(a)).

Inspection Report# : [2012004](#) (pdf)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Plant Operation With An Unacceptable ASME Code Class 2 Pressure Boundary Flaw

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR 50.55a(g)(4) because the licensee failed to identify and evaluate an American Society of Mechanical Engineers (ASME) Code Class pressure boundary flaw. Specifically, between May 22 and June 26, 2012, the licensee did not identify that leakage in the Unit 2 containment from an unknown source was from a weld in the steam generator A blowdown line, an ASME Section XI Code Class 2 high energy component. The issue was entered into the licensee's corrective action program as action requests AR01789202 and AR01797798 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Initiating Events Cornerstone attribute of equipment performance and adversely affected the reliability of the steam generation systems (steam generator, feedwater, or main steam); thereby, directly impacting the cornerstone objective to limit the likelihood of events that upset plant stability during power operations. Specifically, the inspectors determined that any potential (and subsequently actual) failure location represented both a containment barrier during a loss of coolant accident and a reactor pressure system boundary during a steam generator tube failure event, in addition to being a potential transient initiator if the leakage became more significant. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 1 for the Initiating Events Cornerstone, dated June 19, 2012. The inspectors answered "No" to the Exhibit 1 questions in Appendix A for transient initiators and support system initiators. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, conservative assumptions. Specifically, the licensee failed to use conservative assumptions in decision making because it developed an operability evaluation demonstrating that continued full power operation was acceptable without reasonable assurance that the leakage was from a mechanical joint, rather than developing reasonable assurance or providing physical evidence, either indirectly or by observation, that the leakage was not pressure boundary leakage (H.1(b)).

Inspection Report# : [2012004](#) (pdf)

Significance:  Jun 30, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure To Incorporate Industry Operating Experience Into Preventive Maintenance Programs For Nuclear Instrumentation

A finding of very low safety significance and associated non-cited violation of 10 CFR 50.65(a)(3) was self-revealed when an unplanned reactor trip of Unit 2 occurred on June 13, 2011, as a result of the failure of a source range detector during low power physics testing. Specifically, the licensee failed to adequately evaluate operating experience and incorporate it into its preventive maintenance program to periodically replace aging electrical subcomponents in nuclear instrumentation systems and a subsequent age related failure resulted in initiating a plant transient. The licensee entered this issue into the corrective action program, and corrective actions to prevent recurrence were initiated.

The finding was determined to be more than minor in accordance with Inspection Manual Chapter 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because the finding was associated with the Initiating Events Cornerstone attribute of equipment performance. Specifically, the availability and reliability of the nuclear instruments was degraded to a point where an instrument failure caused a reactor trip, an event that adversely impacted the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. The finding has a cross-cutting aspect in the area of corrective action program, evaluation/extent of condition. Specifically, the licensee failed to thoroughly evaluate related nuclear instrument failure rates so that the resolutions addressed the causes and extent of conditions for age-related failures of electrical subcomponents. (Section 40A3.4)

Inspection Report# : [2012003](#) (*pdf*)

Mitigating Systems

Significance:  Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Update The Fire Emergency Plan

The inspectors identified a finding of very low safety significance and associated non-cited violation of the Point Beach Nuclear Plant Renewed Facility Operating License, because the licensee failed to include electrical and physical hazards, which were installed as a result of the extended power uprate modification, in the Fire Emergency Plan (FEP). Specifically, this failure could have adversely impacted the fire brigade's ability to fight a fire in fire zones 304N and 304S. The issue was entered into the licensee's corrective action program as action request AR01833683 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating Systems Cornerstone attribute of equipment performance, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to include electrical and physical hazards in FEP 4.12, which were installed as a result of the extended power uprate modification, could have adversely impacted the fire brigade's ability to fight a fire in fire zones 304N and 304S. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, and Appendix A, "The Significance Determination Process (SDP) for Findings At Power," Exhibit 2 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "No" to the Appendix A, Exhibit 2.B question for external event mitigating systems (Seismic/Fire/Flood/Severe Weather Protection Degraded). Therefore, inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to coordinate the work activities associated with the extended power uprate modification such that the impact of the modification was evaluated against all applicable programs, including fire protection, consistent with nuclear safety. (H.3(a))

Inspection Report# : [2012005](#) (*pdf*)

Significance:  Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Scoping Of A Non-Safety-Related System Into The Maintenance Rule

- The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR 50.65(b)(2)(i), because the licensee failed to adequately scope a non-safety-related component relied upon to mitigate accidents or transients. Specifically, the licensee failed to include the non-safety-related electrohydraulic control system over pressure delta temperature (OP?T) and over temperature delta temperature (OT?T) automatic runback features, as part of their maintenance effectiveness monitoring program. The issue was entered into the licensee's corrective action program as action request AR01804588 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating Systems Cornerstone attribute of equipment performance, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, failure to monitor the performance or condition of the electrohydraulic control system could impact the ability of the system to initiate a runback and respond to an event in the desired manner. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, and Appendix A, "The Significance Determination Process (SDP) for Findings At Power," Exhibit 2 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "No" to the Appendix A, Exhibit 1 questions for mitigating structures, systems, and components, and functionality. Therefore, inspectors determined the finding to be of very low safety significance. The inspectors determined that since the scoping of the systems had occurred more than two years in the past, and the opportunity to reevaluate system scoping had not occurred recently, that the finding did not represent current plant performance, and therefore did not have a cross-cutting aspect associated with it.

Inspection Report# : [2012005](#) (*pdf*)

Significance: G Dec 31, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Condition Prohibited by Technical Specification 3.8.2, AC Sources-Shutdown

A finding of very low safety significance and associated NCV of TS 3.8.2, Condition B, Required Action 1 (Immediately) was self revealed when the licensee's outage related activities rendered both Unit 2 safety related buses inoperable. Specifically, the licensee's outage related activities involved tagging out direct current control power to Unit 2 train A and train B safeguards relay circuitry in order to support termination of wiring. The issue was entered into the licensee's corrective action program as action request AR01639531 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating Systems Cornerstone attribute of Design Control, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process (SDP) for Findings At-Power," Exhibit 1 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "Yes" to Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. The inspectors determined the finding to be of very low safety significance because at no point were all four emergency diesel generators inoperable. The finding has a cross cutting aspect in the area of human performance, work practices, human error prevention techniques, because the licensee failed to validate the impact of the underlying assumptions associated with the clearance orders on the technical specification requirements so that the equipment affected were not rendered inoperable (H.4(a)). (Section 40A3.6)

Inspection Report# : [2012005](#) (*pdf*)

Significance: G Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Implement Risk Management Actions During Various Emergent Work Activities

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR 50.65 (a)(4) because the licensee failed to properly manage and assess risk for various emergent work activities.

Specifically, the licensee failed to manage the risk associated with the gas turbine generator (G-05) failure out of service duration, the G-05 unavailability when on the turning gear, and the Unit 1 turbine electrohydraulic control (EHC) system in manual. The issue was entered into the licensee's corrective action program as action requests AR01808661 and AR01787706 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because the failure to properly manage and assess risk, if left uncorrected, would have the potential to become a more significant safety concern. Specifically, the inspectors determined that the addition of a Unit 1 transient initiator and of G-05 modeled as out of service into the licensee's safety monitor program for risk was more than minor because the licensee's risk assessment was based on incorrect assumptions that changed the outcome of the assessment. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix K, "Maintenance Risk Assessment And Risk Management Significance Determination Process," dated May 19, 2005. The inspectors determined that the finding was a mitigating systems contributor, evaluated the risk deficit for each instance, and found that the issue screened as having very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to define and effectively communicate expectations regarding procedural compliance and ensure personnel follow procedures. Specifically, in all instances the licensee failed to communicate expectations regarding compliance as required by station nuclear procedure (NP) 1.1.4, and ensure personnel followed implementing procedure NP 10.3.7, for risk management (H.4(b)).

Inspection Report# : [2012004](#) (pdf)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Weld Design Deficiency In Emergency Diesel Generator Missile Protection Barriers

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for a deficiency in weld evaluations in the licensee design calculation of the new missile protection steel barriers. These barriers were installed for protection of the emergency diesel generators G-01 and G-02 exhaust pipes from a tornado missile strike. Specifically, the inspectors identified two examples where critical welds were not adequately addressed in the calculation. The issue was entered into the licensee's corrective action program as action requests AR01771762 and AR01772431 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," and Appendix E, "Example of Minor Issues," dated August 11, 2009, and found that it was similar to Example 3a and it was associated with the Mitigating Systems Cornerstone attribute of Design Control and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 1 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "Yes" to Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to ensure supervisory oversight of the contractor activities to support nuclear safety. Specifically, in the examples noted, the licensee failed to adequately review the calculation performed by the contractor to verify that the assumptions and engineering judgments were adequately justified and consistent with the installation (H.4(c)).

Inspection Report# : [2012004](#) (pdf)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Transient Materials Not Removed From Containment Prior To Reactor Startup

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to remove a plastic bag of transient materials that could interact with the containment sump recirculation strainer. Specifically, while performing the containment closure inspection prior to reactor startup, the inspectors identified a large plastic bag containing mop

heads and cleaning materials that, if left in containment, could interact with the containment recirculation sump suction strainer. The licensee took immediate corrective action to remove the items from containment. The issue was entered into the licensee's corrective action program for resolution as action requests AR01781331 and AR01808631 for evaluation and development of additional corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating System Cornerstone attribute of equipment performance and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the low head safety injection system availability and reliability could be reduced by material clogging the recirculation sump suction strainer. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 2 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "Yes" to Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. Therefore, inspectors determined the finding to be of very low safety significance. The finding did not have a cross-cutting aspect because the cause was identical to the cause for the boric acid not being removed from containment isolation valve 2SC-955, as required by procedure, an issue also identified during the inspection, and the cross cutting aspect was captured by that issue.

Inspection Report# : [2012004](#) (pdf)

Significance: G Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Incorporate WOG ERG, Revision 2, Into The EOPs

The inspectors identified a finding of very low safety significance and associated non-cited violation of Technical Specification 5.4, "Procedures." Specifically, the licensee failed to maintain its emergency operating procedures (EOPs) with the safety significant changes provided in the Westinghouse Owners Group Emergency Response Guidelines (WOG ERGs), Revision 2. The issue was entered in the licensee's corrective action program as action request AR01779635 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating Systems Cornerstone attribute of procedure quality and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the inspectors determined that the failure to update EOPs to implement Revision 2 of the WOG ERGs significantly beyond the current industry standard of two years would result in a delay when terminating Primary To Secondary Leakage during a steam generator tube rupture event. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 2 for the the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "Yes" to Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, resources, because the licensee failed to assure resources were available and adequate to complete the WOG ERG, Revision 2 EOP updates in a timely manner commensurate with risk and safety (H.2(c)).

Inspection Report# : [2012004](#) (pdf)

Significance: G Jun 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Establish Emergency Diesel Generator Ventilation System Testing

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," because the licensee failed to establish routine testing procedure that

demonstrated room temperatures would be maintained. Specifically, on March 29, 2012, the inspectors identified that the licensee failed to establish routine testing procedure that demonstrated the air flows for emergency diesel generators G-01 and G-02 ventilation systems would perform adequately to ensure that the room temperatures would be maintained. The licensee entered this issue into its corrective action program, and corrective actions included performance of air flow measurements on the fan units, creation of a preventive maintenance requirement for taking periodic flow measurements, and assessment of the identified issue through a condition evaluation.

The finding was determined to be more than minor in accordance with Inspection Manual Chapter 0612, Appendix B, "Issue Screening," dated December 24, 2009. The inspectors determined that this finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute for design control. Specifically, it adversely affected the Mitigating System Cornerstone objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. This finding has a cross-cutting aspect in the area of human performance, decision making. Specifically, the licensee did not use conservative assumptions regarding the verification of the proper air flow through the safety related gravity dampers in the emergency diesel generators G-01 and G-02 rooms. (Section 1R19)

Inspection Report# : [2012003](#) (*pdf*)

Significance:  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Follow Procedure And Implement Post-Maintenance Testing For Main Feedwater Regulating Valves Following EPU Modifications

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," because the licensee failed to follow work orders to properly configure and perform post maintenance testing (PMT) of the main feedwater regulating valve (MFRV) limit switches. As a result, the limit switches that provide an input into the anticipated transient without scram mitigation system actuation circuitry (AMSAC) were not tested. Specifically, on June 10, 2011, when engineering change EC 12054 for the MFRVs was partially turned over to and accepted by operations for Mode 2 and AMSAC was required to be functioning, the licensee failed to perform a PMT as required by plant procedures. The licensee entered this issue into its corrective action program for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because, if left uncorrected, the failure to perform PMT could lead to a more significant safety concern. Specifically, the failure to perform PMT of safety or risk related components prior to the operational condition for which the equipment was required could result in a latent failure that would only be discovered during a valid demand. This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee did not appropriately coordinate work activities by incorporating action to address the impact of changes to the activity on the plant and human performance. (H.3(b))
Inspection Report# : [2012002](#) (*pdf*)

Significance:  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform Operability Evaluations As Required By Procedure

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to perform an operability evaluation of the impact of door deficiencies on their ability to function as a high energy line break (HELB) barrier, fire (safe shutdown) door, and flood barrier. Specifically, the inspectors identified condition reports written between December 13, 2011, and March 8, 2012, for degraded doors credited as HELB barriers, safe shutdown doors, and flood barriers; however, the licensee failed to perform an operability evaluation of the conditions as required by plant procedures. The licensee entered this issue into its corrective action program for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection

Reports,” Appendix B, “Issue Screening,” dated December 24, 2009, because, if left uncorrected, the failure to perform operability evaluations and recognize conditions that could render equipment inoperable could lead to a more significant safety concern. The finding has a cross-cutting aspect in the area of problem identification and resolution, corrective action, because the licensee failed to take appropriate action to address safety issues and adverse trends in a timely manner. Although the licensee had previously recognized this and initiated training to correct the knowledge based aspects of the issue, there were no interim barriers in place during the long duration needed to complete the training activity. (P.1(d))

Inspection Report# : [2012002](#) (pdf)

Barrier Integrity

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Boric Acid Not Removed From Containment Isolation Valve As Required by Procedure

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” for the failure to clean boric acid from the Unit 2 reactor coolant system hot leg sample isolation valve 2SC-955. Specifically, during the containment closeout tour performed by the inspectors, the inspectors identified that boric acid leakage on valve 2SC-955 had not been cleaned as required by the boric acid program. The licensee subsequently cleaned the valve prior to restart of the reactor and entered the issue into its corrective action program for resolution as action requests AR01782290, AR01765986, AR01780951, and AR01797802, for evaluation and development of additional corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, “Power Reactor Inspection Reports,” Appendix B, “Issue Screening,” dated September 7, 2012, because it was associated with the Barrier Integrity Cornerstone attribute of reactor coolant system equipment and barrier performance and adversely affected the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Additionally, if left uncorrected, it could impact the operators’ ability to verify a containment isolation actuation, thereby adversely affecting the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. The inspectors evaluated the finding using IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Initial Characterization of Findings,” Tables 2 and 3, dated June 19, 2012, and Appendix A, “The Significance Determination Process (SDP) for Findings At-Power,” Exhibit 2 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered “Yes” to Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, systematic processes, because the licensee failed to use a systematic process when making decisions related to the cleaning of boric acid components during the unplanned shutdown. Specifically, the licensee’s communications and interfaces for performing the activities and developing corrective actions were not approached rigorously and systematically when the duration of the unplanned outage was significantly shortened, and plant startup timelines modified the expected boric acid cleaning plans (H.1(a)).

Inspection Report# : [2012004](#) (pdf)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedural Guidance For Heavy Loads Operations

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee’s failure to have adequate procedures in place to ensure that heavy loads were operated safely within the primary auxiliary building (PAB). Specifically, the inspectors determined that the licensee failed to incorporate minimum crane operating temperature limits into procedures to avoid brittle fracture of structural components below the nil-ductility transition temperature.

The issue was entered into the licensee's corrective action program for resolution as action request AR01783306 for evaluation and development of corrective actions which included revising procedures to identify the minimum operating temperature of the PAB crane.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Barrier Integrity Cornerstone attribute of procedure quality and adversely affected the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events because a PAB crane heavy load drop could cause damage to spent fuel. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 3 for the Barrier Integrity Cornerstone, dated June 19, 2012. The inspectors answered "No" to Exhibit 3 questions in Appendix A for the spent fuel pool. Therefore, the inspectors determined the finding to be of very low safety significance. In accordance with IMC 0612, Section 06.03.c, a cross-cutting aspect will not be assigned to this finding as it has occurred outside of the nominal three-year period and is not representative of present performance.

Inspection Report# : [2012004](#) (pdf)

Significance:  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation


Scaffold Construction Interferes With The Operation Of Containment Spray Suction Valve

A finding of very low safety significance and a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," were self revealed during the preparation for surveillance testing when the licensee failed to implement existing procedural guidance for the control of clearances between installed scaffolding and plant equipment. Specifically, scaffolding was constructed too close to the Unit 2 containment spray suction isolation valve from the residual heat removal (RHR) heat exchanger interfering with the operation of the valve. The licensee entered this issue into its corrective action program for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because the finding was associated with the Barrier Integrity Cornerstone attribute of structures, systems, and components, and barrier performance, and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers, specifically the containment, would be able to protect the public from radionuclide releases caused by accidents or events. The finding has a cross-cutting aspect in the area of problem identification and resolution, trending, because the licensee did not assess information from the corrective action program in the aggregate to identify programmatic and common cause problems. Specifically, the licensee had identified similar issues of sufficient importance and quantity that if trended, had the potential to preclude the event. (P.1(b))

Inspection Report# : [2012002](#) (pdf)

Emergency Preparedness

Significance:  Apr 20, 2012

Identified By: NRC

Item Type: VIO Violation

Protective Action Recommendation Weakness

An NRC identified finding with a preliminary low to moderate safety significance and one associated apparent violation of 10 CFR 50.47(b)(10) for failure to develop and put into place guidelines for the choice of protective actions during an emergency that were consistent with Federal guidance. Federal guidance for the choice of protective actions during an emergency is described in EPA 400 R 92 001, and states, in part, that withdrawal of protective actions from areas where they have already been implemented is usually not advisable during the early phase because of the potential for confusion and possibly impede implementation of protective actions which could place the public

at additional risk. Additionally, Federal guidance described in NUREG 0654/FEMA REP 1, Supplement 3, states, in part, licensees should not relax protective actions until the source of the threat is under control. In the case of a known impediment to evacuation, the licensee's emergency implementing procedure, EPIP 1.3, "Dose Assessment and Protective Action Recommendations," incorrectly directed key decision makers to withdraw protective actions to evacuate the public and replace it with a recommendation to shelter the public. After the NRC identified the finding, the licensee immediately revised its emergency implementing procedure to be consistent with Federal guidance.

This finding is more than minor because it affected the Emergency Preparedness Cornerstone objective of implementing adequate measures to protect the health and safety of the public during a radiological emergency, and is associated with the cornerstone attributes of emergency response organization performance and procedure quality. Specifically, the withdrawal of implemented protective actions could cause confusion of offsite authorities and the public. The inspectors evaluated the finding using the SDP and determined this finding screened as preliminarily White. The finding has a cross cutting aspect in the area of Human Performance, Resources, because the licensee failed to maintain complete, accurate, and up to date procedures as early as 2003 when the licensee returned sheltering to its range of protective action recommendation emergency plans and procedures.

Inspection Report# : [2012503](#) (*pdf*)

Inspection Report# : [2012504](#) (*pdf*)

Occupational Radiation Safety

Significance:  Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Implement And Maintain Procedures Regarding Breathing Air Quality

The inspectors identified a finding of very low safety significance (Green) and associated non-cited violation of 10 CFR 20.1703 for the failure to implement and maintain written procedures regarding breathing air quality which resulted in the failure to perform breathing air quality tests since December 2011. This issue was entered into the licensee's corrective action program (CAP) as AR01821842. An air quality test was subsequently performed resulting in grade "D" or better air and a review of past air compressor maintenance was performed to provide adequate assurance that breathing air met the grade "D" requirements since the last test in December 2011. The licensee has also made necessary procedural changes to ensure air quality tests are performed on a quarterly basis.

The performance deficiency was determined to be of more than minor safety significance in accordance with IMC 0612, Appendix B, "Issue Screening," because if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, continued failure to test for breathing air quality could have resulted in unbreathable air being introduced into the licensee's SCBAs and control room emergency breathing air system. The inspectors also reviewed the guidance in IMC 0612, Appendix E, "Examples of Minor Issues," and did not find any similar examples. In accordance with IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," the inspectors determined that the finding had very low safety significance (Green) because the finding did not involve: (1) ALARA planning and controls, (2) a radiological overexposure, (3) a substantial potential for an overexposure, or (4) a compromised ability to assess dose. The primary cause of this finding was related to the cross-cutting aspect of human performance with the component of decision making in that the licensee communicates decisions and the basis for decisions to personnel who have a need to know the information in order to perform the work safely, in a timely manner. (H.1(c))

Inspection Report# : [2012005](#) (*pdf*)

Significance:  Jun 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Compliance With 10 CFR 20.1701 To Control The Concentration Of Radioactive Material In Air And Ensure That Radiological Airborne Hazards Would Be Minimized In TSC During Design-Based Accident

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR 20.1701. Specifically, the inspectors identified deficiencies, as of January 19, 2012, in the licensee's testing program for assuring that the technical support center (TSC) ventilation system was in compliance with the system's design basis. The licensee's TSC high efficiency particulate air and charcoal filter efficiencies were not tested to the design criteria. The licensee documented this issue in its corrective action program and the corrective actions included revising applicable procedures. In addition, the licensee performed a calculation to show that the TSC ventilation system was capable of maintaining a radiological habitability of less than 5 Rem total effective dose equivalent for the duration of the design base accidents. The calculation was based on actual historical filter testing efficiencies.

The finding was more than minor because it was associated with the program and process attribute of exposure control of the Occupational Radiation Safety Cornerstone and adversely affected the cornerstone objective of ensuring the adequate protection of worker health and safety from exposure radiation and radioactive material. Specifically, inappropriately testing installed emergency ventilation system filters designed to mitigate workers' radiation exposures did not validate that the TSC ventilation system was capable of performing its intended design function of minimizing worker exposures to airborne radioactive materials. The finding was assessed using the occupational radiation safety significance determination process and was determined to be of very low safety significance (Green) because it was not an as-low-as-is-reasonable-achievable planning issue, there was no overexposure or potential for overexposure, and the licensee's ability to assess dose was not compromised. The inspectors determined that the most significant contributor to the finding was a cross-cutting aspect in the area of human performance, resources. Specifically, the licensee failed to ensure that the TSC ventilation filter testing protocol assured compliance to the system's designed margins. (Section 2RS3)

Inspection Report# : [2012003](#) (pdf)

Significance:  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Determining An Individual's Dose Of Record With Discrepant TLD/ED Data Inputs

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 20.1201(c). Specifically, the licensee failed to accurately assess and assign the appropriate individual dose received on multiple (three) occasions in the first quarter 2010, given thermoluminescent dosimeter (TLD) to electronic dosimeter (ED) data mismatches. The issue was entered in the licensee's corrective action program as AR01730419. The licensee's immediate corrective actions included assigning the appropriate exposures to the involved individuals.

The finding was determined to be more than minor in accordance with IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," because it was associated with the program and process attribute of the Occupational Radiation Safety Cornerstone, and adversely affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation, in that not assigning an individual the appropriate dose received affected the licensee's ability to monitor, control, and limit radiation exposures. Specifically, the inspectors determined that the finding had very low safety significance (Green) because the finding did not involve: (1) as low as is reasonably achievable (ALARA) planning and controls; (2) a radiological overexposure; (3) there was not a substantial potential for an overexposure; and (4) there was no compromised ability to assess dose. This finding has a cross-cutting aspect in the area of human performance, work practices, specifically, that the licensee ensures the use of human error prevention techniques. (H.4(a))

Inspection Report# : [2012002](#) (pdf)

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Manager Working Outage Hours Contrary To Guidance

The inspectors identified a Severity Level IV non-cited violation and associated finding of very low safety significance of 10 CFR 26.207(a), "Waivers," for the licensee's failure to perform multiple activities as required when licensed reactor operators in the shift manager (SM) position worked outage hours during the Unit 1 outage in fall 2011. Specifically, for each circumstance where an SM exceeded operating hours, the licensee did not meet the following requirements: a determination that the waiver is necessary to mitigate or prevent a condition adverse to safety; a face to face assessment of the individual to determine that there was reasonable assurance that the individual would be able to safely and competently perform his or her duties during the additional work period for which the waiver will be granted; and a circumstance did not exist that could not have been reasonably controlled because additional personnel could have been added to the shift to perform the related outage activities. The issue was entered into the licensee's corrective action program for resolution as action request AR01797782, for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because if left uncorrected, the exclusion of workers from work hour controls could have led to a more significant safety concern due to personnel exceeding work hour limits while performing safety related or risk significant activities. Specifically, without proper fatigue assessments, incorrect assessment or directions could be provided by the SM for routine activities or during transient/emergency response. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix M, "Significance Determination Process Using Qualitative Criteria," dated April 12, 2012. The inspectors determined that the finding was of very low safety significance because no deficiencies which affected risk significant structures, systems, or components occurred as a result of SM fatigue. This finding has a cross-cutting aspect in the area of problem identification and resolution, self and independent assessment, because the licensee failed to conduct sufficient in-depth self assessments. Specifically, the licensee conducted a self assessment of the fatigue rule annually with its corporate licensing department giving the licensee the prior opportunity to identify and correct this issue had the self assessments been more rigorous (P.3(a)).

Inspection Report# : [2012004](#) (*pdf*)

Significance: N/A Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform Adequate Evaluations To Ensure Compliance With 10 CFR 72.212(b)(6) And 10 CFR 72.122(b)(2)(i)

The inspectors identified a Severity Level IV non-cited violation of 10 CFR 72.146, "Design Control," for the licensee's failure to perform adequate evaluations to ensure compliance with 10 CFR 72.122(b)(2)(i) and 10 CFR 72.212(b)(6). Specifically, the inspectors identified that the licensee failed to evaluate that the reactor site parameters, including analyses of earthquakes, were enveloped by the transfer cask design basis. The issue was entered into the licensee's corrective action program for resolution as action request AR01780357, for evaluation and development of corrective actions.

4Q/2012 Inspection Findings - Point Beach 2

The violation was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," and Appendix E, "Example of Minor Issues," dated August 11, 2009, and found that it was similar to Example 3i. Specifically, the licensee's lack of evaluation did not assure cask integrity during a design basis earthquake and an additional calculation was required to evaluate the effects of the design basis earthquake during dry shielded canister processing operations in the primary auxiliary building on the cask decontamination stand in accordance with the Independent Spent Fuel Storage Installation (ISFSI) licensing/design basis analysis requirements. Consistent with the guidance in the NRC Enforcement Manual, Section 2.6.D, if a violation does not fit an example in the enforcement policy violation examples, it should be assigned a severity level: (1) commensurate with its safety significance; and, (2) informed by similar violations addressed in the Violation Examples. Therefore, the inspectors determined violation screened as having very low safety significance (Severity Level IV). Specifically, following the inspection inquiry the licensee revised their calculations and determined that overturning and sliding of the transfer cask in the primary auxiliary building on the cask decontamination stand and in the spent fuel pool would not occur during the design basis earthquake. In accordance with Section 2.2 of the NRC Enforcement Policy, ISFSIs are not subject to the Significance Determination Process (SDP) and, thus, traditional enforcement will be used for these facilities and thus a cross-cutting aspect is not assigned to this violation. In accordance with Section 2.2 of the NRC Enforcement Policy, ISFSIs are not subject to the SDP and, thus, traditional enforcement will be used for these facilities and thus a cross-cutting aspect is not assigned to this violation.

Inspection Report# : [2012004](#) (*pdf*)

Last modified : February 28, 2013

Point Beach 2

1Q/2013 Plant Inspection Findings

Initiating Events

Significance:  Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Properly Implement a Compensatory Fire Watch As Required by the Fire Protection Program

A finding of very low safety significance and an associated non-cited violation (NCV) of Technical Specification (TS) 5.4.1.h, "Fire Protection Implementation," for Units 1 and 2, was identified by the inspectors for the licensee's failure to implement compensatory fire watches for multiple fire zones in the plant auxiliary building, in accordance with the fire protection program requirements. Specifically, the licensee failed to implement the guidelines for compensatory fire watches as described in Operations Manual (OM) 3.27, "Control of Fire Protection and Appendix R Safe Shutdown Equipment" for the affected fire zones. The issue was entered into the licensee's corrective action program (CAP) as AR01855430.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Initiating Events Cornerstone attribute of Protection Against External Factors (Fire) and adversely affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during plant operations. The inspectors evaluated the finding using IMC 0609, Appendix F, because the finding degraded the ability to adequately implement fire prevention and administrative controls affecting the ability to reach and maintain safe shutdown capabilities. A Region III (RIII) Senior Reactor Analyst (SRA) performed a modified Phase 2 evaluation and determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to define and effectively communicate expectations regarding procedural compliance and personnel did not follow procedures (H.4(b)). Specifically, the expectation for procedural compliance, for when the fire zones become high radiation areas requires that fire rounds are to be performed by Operations instead of security.

Inspection Report# : [2013002](#) (*pdf*)

Significance:  Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Unauthorized Transient Combustibles

The inspectors identified a finding of very low safety significance and associated non-cited violation of Technical Specification 5.4.1.h for Units 1 and 2 for the licensee's failure to control transient combustible materials in accordance with the fire protection program requirements. Specifically, the licensee failed to implement the guidelines specified in Procedure NP 1.9.9, "Transient Combustible Control," when they installed an energized extension cord (combustible material) for temporary lighting in a combustible exclusion area located in fire zone 151. Upon discovery, the licensee relocated the extension cord and placed the issue into their corrective action program as action request AR01811414.

The inspectors determined that this finding was more than minor in accordance with IMC 0612, Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Initiating Events cornerstone attribute of Protection Against External Factors (Fire) and adversely affected the cornerstone objective of

limiting the likelihood of those events that upset plant stability and challenge critical safety functions during plant operations. Specifically, the inspectors determined that the routing of the energized extension cord in the CS pumps area could potentially affect both redundant trains of the charging pumps located in the area; and that the transient combustible materials were routed in a combustible free zone required for separation of redundant trains because the extension cord was installed in a combustible free zone separating redundant trains required for safe shutdown. The inspectors evaluated the finding using IMC 0612, Appendix E, "Example of Minor Issues," dated August 11, 2009, and found that it was similar to Example 4.k. This finding was of very low safety significance because the installation of the extension cord represented a low degradation against the combustible controls program. The finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to coordinate the approval of a transient combustible control form with the fire protection engineer prior to routing the extension cord thru the containment spray pumps area. (H.3(b))

Inspection Report# : [2012005](#) (*pdf*)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: FIN Finding

Failure to Adequately Control Materials Classified As High Winds/Tornado Hazards

The inspectors identified a finding of very low safety significance for the licensee's failure to maintain control over the proper storage and placement of materials that were classified as high winds/tornado hazards, within the risk significant areas of the outdoors protected area, in accordance with station procedure NP 1.9.6, "Plant Cleanliness and Storage." Specifically, the inspectors identified unsecured material on wood pallets near the station transformers 1X-04 and 2X-04, which provided offsite power to both units. The licensee took immediate corrective action to remove the material. The issue was entered into the licensee's corrective action program for resolution as action request AR01788119 for evaluation and development of additional corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Initiating Events Cornerstone attribute of equipment performance and adversely affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Additionally, if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, the loose material could have affected offsite power during periods of high winds. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 1 for the Initiating Events Cornerstone, dated June 19, 2012. The inspectors answered "No" to the Exhibit 1 questions in Appendix A for transient initiators and support system initiators. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work practices, because licensee personnel did not appropriately plan work activities by incorporating job site conditions, including environmental conditions, which might have impacted plant structures, systems, and components (H.3(a)).

Inspection Report# : [2012004](#) (*pdf*)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Plant Operation With An Unacceptable ASME Code Class 2 Pressure Boundary Flaw

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR 50.55a(g)(4) because the licensee failed to identify and evaluate an American Society of Mechanical Engineers (ASME) Code Class pressure boundary flaw. Specifically, between May 22 and June 26, 2012, the licensee did not identify that leakage in the Unit 2 containment from an unknown source was from a weld in the steam generator A

blowdown line, an ASME Section XI Code Class 2 high energy component. The issue was entered into the licensee's corrective action program as action requests AR01789202 and AR01797798 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Initiating Events Cornerstone attribute of equipment performance and adversely affected the reliability of the steam generation systems (steam generator, feedwater, or main steam); thereby, directly impacting the cornerstone objective to limit the likelihood of events that upset plant stability during power operations. Specifically, the inspectors determined that any potential (and subsequently actual) failure location represented both a containment barrier during a loss of coolant accident and a reactor pressure system boundary during a steam generator tube failure event, in addition to being a potential transient initiator if the leakage became more significant. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 1 for the Initiating Events Cornerstone, dated June 19, 2012. The inspectors answered "No" to the Exhibit 1 questions in Appendix A for transient initiators and support system initiators. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, conservative assumptions. Specifically, the licensee failed to use conservative assumptions in decision making because it developed an operability evaluation demonstrating that continued full power operation was acceptable without reasonable assurance that the leakage was from a mechanical joint, rather than developing reasonable assurance or providing physical evidence, either indirectly or by observation, that the leakage was not pressure boundary leakage (H.1(b)).

Inspection Report# : [2012004](#) (pdf)

Significance:  Jun 30, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure To Incorporate Industry Operating Experience Into Preventive Maintenance Programs For Nuclear Instrumentation

A finding of very low safety significance and associated non-cited violation of 10 CFR 50.65(a)(3) was self-revealed when an unplanned reactor trip of Unit 2 occurred on June 13, 2011, as a result of the failure of a source range detector during low power physics testing. Specifically, the licensee failed to adequately evaluate operating experience and incorporate it into its preventive maintenance program to periodically replace aging electrical subcomponents in nuclear instrumentation systems and a subsequent age related failure resulted in initiating a plant transient. The licensee entered this issue into the corrective action program, and corrective actions to prevent recurrence were initiated.

The finding was determined to be more than minor in accordance with Inspection Manual Chapter 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated December 24, 2009, because the finding was associated with the Initiating Events Cornerstone attribute of equipment performance. Specifically, the availability and reliability of the nuclear instruments was degraded to a point where an instrument failure caused a reactor trip, an event that adversely impacted the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. The finding has a cross-cutting aspect in the area of corrective action program, evaluation/extent of condition. Specifically, the licensee failed to thoroughly evaluate related nuclear instrument failure rates so that the resolutions addressed the causes and extent of conditions for age-related failures of electrical subcomponents. (Section 4OA3.4)

Inspection Report# : [2012003](#) (pdf)

Mitigating Systems

Significance: G Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Establish Adequate Procedures to Respond to Probable Maximum Precipitation Event

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to establish an abnormal operating procedure (AOP) to respond to a flooding event and for failure to establish procedures for control and maintenance of external flooding design features for the probable maximum precipitation event as described in the FSAR. The issue was entered into the licensee's CAP as AR01856322 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Procedure Quality, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). The inspectors evaluated the finding using IMC 0609, Appendix A, Exhibit 2, for the Mitigating Systems Cornerstone, and determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, resources, because the licensee failed to maintain long term plant safety by maintenance of the external flooding design features (H.2(a)). Specifically, in the recent past, the licensee inappropriately cancelled the preventive maintenance associated with the ditches and storm drains following the completion of the drainage system study in June 2010.

Inspection Report# : [2013002](#) (*pdf*)

Significance: G Mar 31, 2013

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Safety Related Bus 2B-04 Supply Breaker Installed With Incorrect Setpoint

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed when the supply breaker to safety-related bus 2B04 tripped prematurely. Specifically, on June 6, 2011, when energizing pressurizer heaters, the feeder breaker to safety related 480 volt bus, 2B04, opened due to an over current condition; and it was later determined that the setpoint for the breaker was incorrectly set at 2000 amps versus 3000 amps as required. The issue was entered into the licensee's CAP as AR01657810. The trip setpoint on the breaker was immediately corrected, and this action restored compliance with the design requirements. Additional corrective actions were initiated to revise the maintenance procedure to list the task as a high risk activity and to add a verification step relative to the set point adjustments.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Mitigating Systems Cornerstone attribute of Human Performance, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix A, Exhibit 2, and determined a detailed risk analysis was needed. A Region III SRA performed the detailed risk evaluation and determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work practices, human error prevention techniques, because the licensee failed to implement peer checking techniques commensurate with the safety significance of the task (H.4(a)). Specifically, a peer check was not used to validate that the safety related trip setpoint of the bus 2B04 supply breaker was accurately set; had it been used, the peer check could have been prevented the occurrence.

Inspection Report# : [2013002](#) (pdf)

Significance: G Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Engineered Safety Feature Steam Line Pressure Dynamics Modules Discovered Outside of Technical Specification Values

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," was identified by the inspectors for the licensee's failure to incorporate a design-basis drift calculation and appropriate tolerances for calibrating the Engineered Safety Features Actuation System steam line pressure dynamic compensation modules into a calibration procedure used to assure TS requirements. The issue was entered into the licensee's CAP as AR01629378.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Mitigating Systems Cornerstone attribute of Design Control, and adversely impacted the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix A, Exhibit 2, for the Mitigating Systems Cornerstone, and determined the finding to be of very low safety significance. The finding has a cross-cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to take corrective action in a timely manner for the issue identified in previous licensee event report LER 266/2010 001 00 and the associated apparent cause evaluation. (P.1(d))

Inspection Report# : [2013002](#) (pdf)

Significance: TBD Mar 31, 2013

Identified By: NRC

Item Type: AV Apparent Violation

Failure to Establish an Adequate Procedure to Implement Wave Run-Up Design Features

(To Be Determined): A finding and an apparent violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's lack of procedural requirements to appropriately implement external flooding wave run-up protection design features as described in the FSAR. The issue was entered into the licensee's CAP as AR01856327 for evaluation and development of corrective actions.

The performance deficiency was screened against the Reactor Oversight Process (ROP) per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Procedure Quality, and adversely affected the cornerstone objective to ensure the availability reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee's failure to appropriately procedurally control and maintain external flooding design features and provide appropriate procedural responses to external events, could negatively impact mitigating systems' ability to respond to an external flooding event. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A, and determined a detailed risk evaluation was needed. This finding does not present an immediate safety concern, in that, the licensee has taken corrective action and revised procedures implementing wave run-up protection features. Specifically, the licensee's procedure has been revised to direct the installation of jersey barriers in conjunction with the use of sandbags, existing jersey barriers have been modified, and sandbags and additional jersey barriers have been purchased and pre-staged. These issues are being characterized as an apparent violation in accordance with the NRC's Enforcement Policy, and its final significance will be dispositioned in separate future correspondence. This finding has a cross-cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to thoroughly evaluate problems such that the resolutions address causes and extent of conditions. (P.1(c))

Inspection Report# : [2013002](#) (pdf)

Significance: G Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Update The Fire Emergency Plan

The inspectors identified a finding of very low safety significance and associated non-cited violation of the Point Beach Nuclear Plant Renewed Facility Operating License, because the licensee failed to include electrical and physical hazards, which were installed as a result of the extended power uprate modification, in the Fire Emergency Plan (FEP). Specifically, this failure could have adversely impacted the fire brigade's ability to fight a fire in fire zones 304N and 304S. The issue was entered into the licensee's corrective action program as action request AR01833683 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating Systems Cornerstone attribute of equipment performance, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to include electrical and physical hazards in FEP 4.12, which were installed as a result of the extended power uprate modification, could have adversely impacted the fire brigade's ability to fight a fire in fire zones 304N and 304S. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, and Appendix A, "The Significance Determination Process (SDP) for Findings At Power," Exhibit 2 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "No" to the Appendix A, Exhibit 2.B question for external event mitigating systems (Seismic/Fire/Flood/Severe Weather Protection Degraded). Therefore, inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to coordinate the work activities associated with the extended power uprate modification such that the impact of the modification was evaluated against all applicable programs, including fire protection, consistent with nuclear safety. (H.3(a))

Inspection Report# : [2012005](#) (*pdf*)

Significance: G Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Scoping Of A Non-Safety-Related System Into The Maintenance Rule

- The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR 50.65(b)(2)(i), because the licensee failed to adequately scope a non-safety-related component relied upon to mitigate accidents or transients. Specifically, the licensee failed to include the non-safety-related electrohydraulic control system over pressure delta temperature (OP?T) and over temperature delta temperature (OT?T) automatic runback features, as part of their maintenance effectiveness monitoring program. The issue was entered into the licensee's corrective action program as action request AR01804588 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating Systems Cornerstone attribute of equipment performance, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, failure to monitor the performance or condition of the electrohydraulic control system could impact the ability of the system to initiate a runback and respond to an event in the desired manner. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, and Appendix A, "The Significance Determination Process (SDP) for Findings At Power," Exhibit 2 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "No" to the Appendix A, Exhibit 1 questions for mitigating structures, systems, and components,

and functionality. Therefore, inspectors determined the finding to be of very low safety significance. The inspectors determined that since the scoping of the systems had occurred more than two years in the past, and the opportunity to reevaluate system scoping had not occurred recently, that the finding did not represent current plant performance, and therefore did not have a cross-cutting aspect associated with it.

Inspection Report# : [2012005](#) (*pdf*)

Significance:  Dec 31, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Condition Prohibited by Technical Specification 3.8.2, AC Sources-Shutdown

A finding of very low safety significance and associated NCV of TS 3.8.2, Condition B, Required Action 1 (Immediately) was self revealed when the licensee's outage related activities rendered both Unit 2 safety related buses inoperable. Specifically, the licensee's outage related activities involved tagging out direct current control power to Unit 2 train A and train B safeguards relay circuitry in order to support termination of wiring. The issue was entered into the licensee's corrective action program as action request AR01639531 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating Systems Cornerstone attribute of Design Control, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process (SDP) for Findings At-Power," Exhibit 1 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "Yes" to Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. The inspectors determined the finding to be of very low safety significance because at no point were all four emergency diesel generators inoperable. The finding has a cross cutting aspect in the area of human performance, work practices, human error prevention techniques, because the licensee failed to validate the impact of the underlying assumptions associated with the clearance orders on the technical specification requirements so that the equipment affected were not rendered inoperable (H.4(a)). (Section 40A3.6)

Inspection Report# : [2012005](#) (*pdf*)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Implement Risk Management Actions During Various Emergent Work Activities

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR 50.65 (a)(4) because the licensee failed to properly manage and assess risk for various emergent work activities.

Specifically, the licensee failed to manage the risk associated with the gas turbine generator (G-05) failure out of service duration, the G-05 unavailability when on the turning gear, and the Unit 1 turbine electrohydraulic control (EHC) system in manual. The issue was entered into the licensee's corrective action program as action requests AR01808661 and AR01787706 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because the failure to properly manage and assess risk, if left uncorrected, would have the potential to become a more significant safety concern. Specifically, the inspectors determined that the addition of a Unit 1 transient initiator and of G-05 modeled as out of service into the licensee's safety monitor program for risk was more than minor because the licensee's risk assessment was based on incorrect assumptions that changed the outcome of the assessment. The inspectors evaluated the finding using IMC

0609, “Significance Determination Process,” Attachment 0609.04, “Initial Characterization of Findings,” Tables 2 and 3, dated June 19, 2012, and Appendix K, “Maintenance Risk Assessment And Risk Management Significance Determination Process,” dated May 19, 2005. The inspectors determined that the finding was a mitigating systems contributor, evaluated the risk deficit for each instance, and found that the issue screened as having very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to define and effectively communicate expectations regarding procedural compliance and ensure personnel follow procedures. Specifically, in all instances the licensee failed to communicate expectations regarding compliance as required by station nuclear procedure (NP) 1.1.4, and ensure personnel followed implementing procedure NP 10.3.7, for risk management (H.4(b)).

Inspection Report# : [2012004](#) (*pdf*)

Significance: G Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Weld Design Deficiency In Emergency Diesel Generator Missile Protection Barriers

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” for a deficiency in weld evaluations in the licensee design calculation of the new missile protection steel barriers. These barriers were installed for protection of the emergency diesel generators G-01 and G-02 exhaust pipes from a tornado missile strike. Specifically, the inspectors identified two examples where critical welds were not adequately addressed in the calculation. The issue was entered into the licensee’s corrective action program as action requests AR01771762 and AR01772431 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, “Power Reactor Inspection Reports,” Appendix B, “Issue Screening,” and Appendix E, “Example of Minor Issues,” dated August 11, 2009, and found that it was similar to Example 3a and it was associated with the Mitigating Systems Cornerstone attribute of Design Control and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Initial Characterization of Findings,” Tables 2 and 3, dated June 19, 2012, and Appendix A, “The Significance Determination Process (SDP) for Findings At-Power,” Exhibit 1 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered “Yes” to Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to ensure supervisory oversight of the contractor activities to support nuclear safety. Specifically, in the examples noted, the licensee failed to adequately review the calculation performed by the contractor to verify that the assumptions and engineering judgments were adequately justified and consistent with the installation (H.4(c)).

Inspection Report# : [2012004](#) (*pdf*)

Significance: G Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Transient Materials Not Removed From Containment Prior To Reactor Startup

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” for the failure to remove a plastic bag of transient materials that could interact with the containment sump recirculation strainer. Specifically, while performing the containment closure inspection prior to reactor startup, the inspectors identified a large plastic bag containing mop heads and cleaning materials that, if left in containment, could interact with the containment recirculation sump

suction strainer. The licensee took immediate corrective action to remove the items from containment. The issue was entered into the licensee's corrective action program for resolution as action requests AR01781331 and AR01808631 for evaluation and development of additional corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating System Cornerstone attribute of equipment performance and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the low head safety injection system availability and reliability could be reduced by material clogging the recirculation sump suction strainer. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 2 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "Yes" to Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. Therefore, inspectors determined the finding to be of very low safety significance. The finding did not have a cross-cutting aspect because the cause was identical to the cause for the boric acid not being removed from containment isolation valve 2SC-955, as required by procedure, an issue also identified during the inspection, and the cross cutting aspect was captured by that issue.

Inspection Report# : [2012004](#) (pdf)

Significance: G Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Incorporate WOG ERG, Revision 2, Into The EOPs

The inspectors identified a finding of very low safety significance and associated non-cited violation of Technical Specification 5.4, "Procedures." Specifically, the licensee failed to maintain its emergency operating procedures (EOPs) with the safety significant changes provided in the Westinghouse Owners Group Emergency Response Guidelines (WOG ERGs), Revision 2. The issue was entered in the licensee's corrective action program as action request AR01779635 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating Systems Cornerstone attribute of procedure quality and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the inspectors determined that the failure to update EOPs to implement Revision 2 of the WOG ERGs significantly beyond the current industry standard of two years would result in a delay when terminating Primary To Secondary Leakage during a steam generator tube rupture event. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 2 for the the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "Yes" to Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, resources, because the licensee failed to assure resources were available and adequate to complete the WOG ERG, Revision 2 EOP updates in a timely manner commensurate with risk and safety (H.2(c)).

Inspection Report# : [2012004](#) (pdf)

Significance: G Jun 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Establish Emergency Diesel Generator Ventilation System Testing

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," because the licensee failed to establish routine testing procedure that demonstrated room temperatures would be maintained. Specifically, on March 29, 2012, the inspectors identified that the licensee failed to establish routine testing procedure that demonstrated the air flows for emergency diesel generators G-01 and G-02 ventilation systems would perform adequately to ensure that the room temperatures would be maintained. The licensee entered this issue into its corrective action program, and corrective actions included performance of air flow measurements on the fan units, creation of a preventive maintenance requirement for taking periodic flow measurements, and assessment of the identified issue through a condition evaluation.

The finding was determined to be more than minor in accordance with Inspection Manual Chapter 0612, Appendix B, "Issue Screening," dated December 24, 2009. The inspectors determined that this finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute for design control. Specifically, it adversely affected the Mitigating System Cornerstone objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. This finding has a cross-cutting aspect in the area of human performance, decision making. Specifically, the licensee did not use conservative assumptions regarding the verification of the proper air flow through the safety related gravity dampers in the emergency diesel generators G-01 and G-02 rooms. (Section 1R19)

Inspection Report# : [2012003](#) (*pdf*)

Barrier Integrity

Significance: G Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Response for Loss of Spent Fuel Pool Cooling Did Not Consider the Most Limited Time to Boil

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the licensee's failure to account for the most limiting spent fuel pool (SFP) time to boil in calculations and procedures. Specifically, the service water design-basis analysis and abnormal operating procedure (AOP) for loss of SFP cooling used a time to boil value based on non-limiting conditions. The issue was entered into the licensee's CAP as AR01852528 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Barrier Integrity Cornerstone, in that, if left uncorrected, it would have lead to a more significant safety concern. The inspectors evaluated the finding using IMC 0609, Appendix A, Exhibit 3, for the Barrier Integrity Cornerstone, and determined the significance of this finding could be evaluated using qualitative criteria in accordance with IMC 0609, Appendix M. With consultation of an RIII SRA, the inspectors determined the finding screened as of very low safety significance because it involved a design-basis event (e.g., loss of cooling accident (LOCA)) on one unit occurring during a short window of time when the SFP is subjected to the maximum allowed heat load shortly after the other unit is defueled. The inspectors did not identify a cross-cutting aspect associated with this finding because the finding was not confirmed to reflect current performance due to the age of the performance deficiency.

Inspection Report# : [2013002](#) (*pdf*)

Significance: G Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Boric Acid Not Removed From Containment Isolation Valve As Required by Procedure

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to clean boric acid from the Unit 2 reactor coolant system hot leg sample isolation valve 2SC-955. Specifically, during the containment closeout tour performed by the inspectors, the inspectors identified that boric acid leakage on valve 2SC-955 had not been cleaned as required by the boric acid program. The licensee subsequently cleaned the valve prior to restart of the reactor and entered the issue into its corrective action program for resolution as action requests AR01782290, AR01765986, AR01780951, and AR01797802, for evaluation and development of additional corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Barrier Integrity Cornerstone attribute of reactor coolant system equipment and barrier performance and adversely affected the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Additionally, if left uncorrected, it could impact the operators' ability to verify a containment isolation actuation, thereby adversely affecting the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 2 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "Yes" to Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, systematic processes, because the licensee failed to use a systematic process when making decisions related to the cleaning of boric acid components during the unplanned shutdown. Specifically, the licensee's communications and interfaces for performing the activities and developing corrective actions were not approached rigorously and systematically when the duration of the unplanned outage was significantly shortened, and plant startup timelines modified the expected boric acid cleaning plans (H.1(a)).

Inspection Report# : [2012004](#) (*pdf*)

Significance: G Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedural Guidance For Heavy Loads Operations

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to have adequate procedures in place to ensure that heavy loads were operated safely within the primary auxiliary building (PAB). Specifically, the inspectors determined that the licensee failed to incorporate minimum crane operating temperature limits into procedures to avoid brittle fracture of structural components below the nil-ductility transition temperature. The issue was entered into the licensee's corrective action program for resolution as action request AR01783306 for evaluation and development of corrective actions which included revising procedures to identify the minimum operating temperature of the PAB crane.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Barrier Integrity Cornerstone attribute of procedure quality and adversely affected the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or

events because a PAB crane heavy load drop could cause damage to spent fuel. The inspectors evaluated the finding using IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Initial Characterization of Findings,” Tables 2 and 3, dated June 19, 2012, and Appendix A, “The Significance Determination Process (SDP) for Findings At-Power,” Exhibit 3 for the Barrier Integrity Cornerstone, dated June 19, 2012. The inspectors answered “No” to Exhibit 3 questions in Appendix A for the spent fuel pool. Therefore, the inspectors determined the finding to be of very low safety significance. In accordance with IMC 0612, Section 06.03.c, a cross-cutting aspect will not be assigned to this finding as it has occurred outside of the nominal three-year period and is not representative of present performance.

Inspection Report# : [2012004](#) (*pdf*)

Emergency Preparedness

Significance: **W** Apr 20, 2012

Identified By: NRC

Item Type: VIO Violation

Protective Action Recommendation Weakness

An NRC identified finding with a preliminary low to moderate safety significance and one associated apparent violation of 10 CFR 50.47(b)(10) for failure to develop and put into place guidelines for the choice of protective actions during an emergency that were consistent with Federal guidance. Federal guidance for the choice of protective actions during an emergency is described in EPA 400 R 92 001, and states, in part, that withdrawal of protective actions from areas where they have already been implemented is usually not advisable during the early phase because of the potential for confusion and possibly impede implementation of protective actions which could place the public at additional risk. Additionally, Federal guidance described in NUREG 0654/FEMA REP 1, Supplement 3, states, in part, licensees should not relax protective actions until the source of the threat is under control. In the case of a known impediment to evacuation, the licensee’s emergency implementing procedure, EPIP 1.3, “Dose Assessment and Protective Action Recommendations,” incorrectly directed key decision makers to withdraw protective actions to evacuate the public and replace it with a recommendation to shelter the public. After the NRC identified the finding, the licensee immediately revised its emergency implementing procedure to be consistent with Federal guidance.

This finding is more than minor because it affected the Emergency Preparedness Cornerstone objective of implementing adequate measures to protect the health and safety of the public during a radiological emergency, and is associated with the cornerstone attributes of emergency response organization performance and procedure quality. Specifically, the withdrawal of implemented protective actions could cause confusion of offsite authorities and the public. The inspectors evaluated the finding using the SDP and determined this finding screened as preliminarily White. The finding has a cross cutting aspect in the area of Human Performance, Resources, because the licensee failed to maintain complete, accurate, and up to date procedures as early as 2003 when the licensee returned sheltering to its range of protective action recommendation emergency plans and procedures.

Inspection Report# : [2012503](#) (*pdf*)

Inspection Report# : [2012504](#) (*pdf*)

Inspection Report# : [2013503](#) (*pdf*)

Occupational Radiation Safety

Significance:  Mar 31, 2013

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Survey for Neutron Dose from Source Storage

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR 20.1501 was self-revealed when the licensee failed to evaluate dose to personnel from neutron radiation. Specifically, on September 5, 2012, it was self revealed to the licensee that unevaluated neutron dose was present in an office area located outside the Radiologically Controlled Area (RCA) due to a source storage room housing a neutron source. This issue was entered into the licensee's CAP as AR01809560. Corrective actions included moving the neutron source into the RCA, performing a condition evaluation, and performing dose estimates to various plant personnel.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because the finding was associated with the Occupational and Public Radiation Safety Cornerstones and adversely affected the cornerstones objective. The inspectors evaluated the finding using IMC 0609, Appendix D, for the Public Radiation Safety Cornerstone, and determined the finding to be of very low safety significance. The finding had a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to ensure supervisory and management oversight of work activities such that nuclear safety is supported (H.4(c)). Specifically, the licensee did not provide supervisory oversight to ensure that the survey program was sufficient to ensure compliance with 10 CFR Part 20 requirements.

Inspection Report# : [2013002](#) (*pdf*)

Significance:  Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Implement And Maintain Procedures Regarding Breathing Air Quality

The inspectors identified a finding of very low safety significance (Green) and associated non-cited violation of 10 CFR 20.1703 for the failure to implement and maintain written procedures regarding breathing air quality which resulted in the failure to perform breathing air quality tests since December 2011. This issue was entered into the licensee's corrective action program (CAP) as AR01821842. An air quality test was subsequently performed resulting in grade "D" or better air and a review of past air compressor maintenance was performed to provide adequate assurance that breathing air met the grade "D" requirements since the last test in December 2011. The licensee has also made necessary procedural changes to ensure air quality tests are performed on a quarterly basis.

The performance deficiency was determined to be of more than minor safety significance in accordance with IMC 0612, Appendix B, "Issue Screening," because if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, continued failure to test for breathing air quality could have resulted in un-breathable air being introduced into the licensee's SCBAs and control room emergency breathing air system. The inspectors also reviewed the guidance in IMC 0612, Appendix E, "Examples of Minor Issues," and did not find any similar examples. In accordance with IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," the inspectors determined that the finding had very low safety significance (Green) because the finding did not involve: (1) ALARA planning and controls, (2) a radiological overexposure, (3) a substantial potential for an overexposure, or (4) a compromised ability to assess dose. The primary cause of this finding was related to the cross-cutting aspect of human performance with the component of decision making in that the licensee communicates decisions and the basis for decisions to personnel who have a need to know the information in order to perform the work safely, in a timely manner. (H.1(c))

Inspection Report# : [2012005](#) (*pdf*)

Significance:  Jun 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Non-Compliance With 10 CFR 20.1701 To Control The Concentration Of Radioactive Material In Air And Ensure That Radiological Airborne Hazards Would Be Minimized In TSC During Design-Based Accident

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR 20.1701. Specifically, the inspectors identified deficiencies, as of January 19, 2012, in the licensee's testing program for assuring that the technical support center (TSC) ventilation system was in compliance with the system's design basis. The licensee's TSC high efficiency particulate air and charcoal filter efficiencies were not tested to the design criteria. The licensee documented this issue in its corrective action program and the corrective actions included revising applicable procedures. In addition, the licensee performed a calculation to show that the TSC ventilation system was capable of maintaining a radiological habitability of less than 5 Rem total effective dose equivalent for the duration of the design base accidents. The calculation was based on actual historical filter testing efficiencies.

The finding was more than minor because it was associated with the program and process attribute of exposure control of the Occupational Radiation Safety Cornerstone and adversely affected the cornerstone objective of ensuring the adequate protection of worker health and safety from exposure radiation and radioactive material. Specifically, inappropriately testing installed emergency ventilation system filters designed to mitigate workers' radiation exposures did not validate that the TSC ventilation system was capable of performing its intended design function of minimizing worker exposures to airborne radioactive materials. The finding was assessed using the occupational radiation safety significance determination process and was determined to be of very low safety significance (Green) because it was not an as-low-as-is-reasonable-achievable planning issue, there was no overexposure or potential for overexposure, and the licensee's ability to assess dose was not compromised. The inspectors determined that the most significant contributor to the finding was a cross-cutting aspect in the area of human performance, resources. Specifically, the licensee failed to ensure that the TSC ventilation filter testing protocol assured compliance to the system's designed margins. (Section 2RS3)

Inspection Report# : [2012003](#) (*pdf*)

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: N/A Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Update the External Flooding Mitigation Features in the FSAR

An SL-IV NCV of 10 CFR Part 50.71(e), "Maintenance of Records, Making of Reports," was identified by the inspectors for the licensee's failure to comply with the requirements to periodically update the FSAR to include an accurate description of the flooding design and credited mitigation features for the site as a result of a modification made to the plant. The issue was entered into the licensee's CAP as AR01819241 for evaluation and development of corrective actions.

The inspectors used IMC 0612, Appendix B, and determined the performance deficiency could be dispositioned using traditional enforcement. Specifically, the inspectors determined that the issue was considered for traditional enforcement because it had the potential for impacting the NRC's ability to perform its regulatory function. The inspectors concluded that the finding is more than minor because, if left uncorrected, this could lead to a more significant safety concern because future changes to the facility, procedures, and programs would not consider the licensing basis information that was removed or never inserted. The finding was determined to be an SL IV violation using Section 6.1 of the NRC's Enforcement Policy because the inaccurate information was not used to make an unacceptable change to the facility or procedures. Since this performance deficiency was dispositioned using traditional enforcement, there is no cross-cutting aspect assigned.

Inspection Report# : [2013002](#) (*pdf*)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Manager Working Outage Hours Contrary To Guidance

The inspectors identified a Severity Level IV non-cited violation and associated finding of very low safety significance of 10 CFR 26.207(a), "Waivers," for the licensee's failure to perform multiple activities as required when licensed reactor operators in the shift manager (SM) position worked outage hours during the Unit 1 outage in fall 2011. Specifically, for each circumstance where an SM exceeded operating hours, the licensee did not meet the following requirements: a determination that the waiver is necessary to mitigate or prevent a condition adverse to safety; a face to face assessment of the individual to determine that there was reasonable assurance that the individual would be able to safely and competently perform his or her duties during the additional work period for which the waiver will be granted; and a circumstance did not exist that could not have been reasonably controlled because additional personnel could have been added to the shift to perform the related outage activities. The issue was entered into the licensee's corrective action program for resolution as action request AR01797782, for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because if left uncorrected, the exclusion of workers from work hour controls could have led to a more significant safety concern due to personnel exceeding work hour limits while performing safety related or risk significant activities. Specifically, without proper fatigue assessments, incorrect assessment or directions could be provided by the SM for routine activities or during transient/emergency response. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix M, "Significance Determination Process Using Qualitative Criteria," dated April 12, 2012. The inspectors determined that the finding was of very low safety significance because no deficiencies which affected risk significant structures, systems, or components occurred as a result of SM fatigue. This finding has a cross-cutting aspect in the area of problem identification and resolution, self and independent assessment, because the licensee failed to conduct sufficient in-depth self assessments. Specifically, the licensee conducted a self assessment of the fatigue rule annually with its corporate licensing department giving the licensee the prior opportunity to identify and correct this issue had the self assessments been more rigorous (P.3(a)).

Inspection Report# : [2012004](#) (*pdf*)

Significance: N/A Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform Adequate Evaluations To Ensure Compliance With 10 CFR 72.212(b)(6) And 10 CFR 72.122(b)(2)(i)

The inspectors identified a Severity Level IV non-cited violation of 10 CFR 72.146, "Design Control," for the licensee's failure to perform adequate evaluations to ensure compliance with 10 CFR 72.122(b)(2)(i) and 10 CFR 72.212(b)(6). Specifically, the inspectors identified that the licensee failed to evaluate that the reactor site parameters, including analyses of earthquakes, were enveloped by the transfer cask design basis. The issue was entered into the licensee's corrective action program for resolution as action request AR01780357, for evaluation and development of corrective actions.

The violation was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," and Appendix E, "Example of Minor Issues," dated August 11, 2009, and found that it was similar to Example 3i. Specifically, the licensee's lack of evaluation did not assure cask integrity during a design basis earthquake and an additional calculation was required to evaluate the effects of the design basis earthquake during dry shielded canister processing operations in the primary auxiliary building on the cask decontamination stand in accordance with the Independent Spent Fuel Storage Installation (ISFSI) licensing/design basis analysis requirements. Consistent with the guidance in the NRC Enforcement Manual, Section 2.6.D, if a violation does not fit an example in the enforcement policy violation examples, it should be assigned a severity level: (1) commensurate with its safety significance; and, (2) informed by similar violations addressed in the Violation Examples. Therefore, the inspectors determined violation screened as having very low safety significance (Severity Level IV). Specifically, following the inspection inquiry the licensee revised their calculations and determined that overturning and sliding of the transfer cask in the primary auxiliary building on the cask decontamination stand and in the spent fuel pool would not occur during the design basis earthquake. In accordance with Section 2.2 of the NRC Enforcement Policy, ISFSIs are not subject to the Significance Determination Process (SDP) and, thus, traditional enforcement will be used for these facilities and thus a cross-cutting aspect is not assigned to this violation. In accordance with Section 2.2 of the NRC Enforcement Policy, ISFSIs are not subject to the SDP and, thus, traditional enforcement will be used for these facilities and thus a cross-cutting aspect is not assigned to this violation. Inspection Report# : [2012004](#) (*pdf*)

Last modified : June 04, 2013

Point Beach 2 2Q/2013 Plant Inspection Findings

Initiating Events

Significance: G Jun 30, 2013

Identified By: NRC

Item Type: FIN Finding

Failure to Control Materials Classified as High Winds/Tornado Hazards

The inspectors identified a finding of very low safety significance for the licensee's failure to maintain control over the proper storage and placement of materials that were classified as high winds/tornado hazards, in accordance with procedure NP 1.9.6, "Plant Cleanliness and Storage." Specifically, the inspectors identified that the licensee failed to perform weekly high wind missile hazards inspections since April 17, 2013. As a result, unsecured wooden pallets, wooden planks, metal rods and a metallic desk were discovered by the inspectors near Units 1 and 2 transformer areas. The issue was entered into the licensee's corrective action program (CAP) for resolution as action request AR01882921. The licensee took immediate corrective action to remove and/or properly store the material after the tornado warning on June 17, 2013.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, because if left uncorrected, the unsecured items would have the potential to lead to a more significant safety concern during high wind and tornado events. The inspectors determined the finding to be of very low safety significance because the inspectors answered "No" to each question listed in IMC 0609, Appendix A, Exhibit 1, "Initiating Event Screening Questions." The inspectors determined that the finding has a cross cutting aspect in the area of human performance, work practices, because the licensee did not provide supervisory or management oversight of work activities such that nuclear safety was supported. Specifically, the licensee failed to provide appropriate oversight of work activities such that, when the program owner of the weekly high wind inspection changed, the requirement to perform weekly high winds tornado hazard walkdowns was not understood (H.4(c)).

Inspection Report# : [2013003](#) (*pdf*)

Significance: G Jun 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Operability Evaluation Process Following Water Leakage into the Control Room

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 50, Appendix B, Criterion V for the licensee's failure to follow procedure EN AA 203 1001, "Operability Determinations/Functionality Assessments." Specifically, following water leakage into the control room, the licensee's immediate operability determination failed to evaluate the effect the leakage had on the control room envelope operability. Additionally, the licensee did not address the functionality of the degraded flood barrier and its impact on operability. This issue was entered into the corrective action program (CAP) as AR01877185. Corrective actions for this issue included performing a test of the control room envelope to demonstrate that appropriate positive pressure could be maintained with the known degraded barrier, and repair of the degraded flood barrier following performance of a functionality assessment.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Protection Against External Factors attribute of the Initiating Event Cornerstone, and

adversely affected the Cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during power operations. The inspectors determined the finding to be of very low safety significance in accordance with IMC 0609, Appendix A, Exhibit 1, because they answered “No” to the questions under Transient Initiators and External Event Initiators. The inspectors concluded that this finding has a cross-cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to thoroughly evaluate this problem such that the resolution addressed the cause and evaluated the condition for operability (P.1(c)).

Inspection Report# : [2013003](#) (*pdf*)

Significance:  Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Properly Implement a Compensatory Fire Watch As Required by the Fire Protection Program

A finding of very low safety significance and an associated non-cited violation (NCV) of Technical Specification (TS) 5.4.1.h, “Fire Protection Implementation,” for Units 1 and 2, was identified by the inspectors for the licensee’s failure to implement compensatory fire watches for multiple fire zones in the plant auxiliary building, in accordance with the fire protection program requirements. Specifically, the licensee failed to implement the guidelines for compensatory fire watches as described in Operations Manual (OM) 3.27, “Control of Fire Protection and Appendix R Safe Shutdown Equipment” for the affected fire zones. The issue was entered into the licensee’s corrective action program (CAP) as AR01855430.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Initiating Events Cornerstone attribute of Protection Against External Factors (Fire) and adversely affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during plant operations. The inspectors evaluated the finding using IMC 0609, Appendix F, because the finding degraded the ability to adequately implement fire prevention and administrative controls affecting the ability to reach and maintain safe shutdown capabilities. A Region III (RIII) Senior Reactor Analyst (SRA) performed a modified Phase 2 evaluation and determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to define and effectively communicate expectations regarding procedural compliance and personnel did not follow procedures (H.4(b)). Specifically, the expectation for procedural compliance, for when the fire zones become high radiation areas requires that fire rounds are to be performed by Operations instead of security.

Inspection Report# : [2013002](#) (*pdf*)

Significance:  Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Unauthorized Transient Combustibles

The inspectors identified a finding of very low safety significance and associated non-cited violation of Technical Specification 5.4.1.h for Units 1 and 2 for the licensee’s failure to control transient combustible materials in accordance with the fire protection program requirements. Specifically, the licensee failed to implement the guidelines specified in Procedure NP 1.9.9, “Transient Combustible Control,” when they installed an energized extension cord (combustible material) for temporary lighting in a combustible exclusion area located in fire zone 151. Upon discovery, the licensee relocated the extension cord and placed the issue into their corrective action program as action request AR01811414.

The inspectors determined that this finding was more than minor in accordance in accordance with IMC 0612, Appendix B, “Issue Screening,” dated September 7, 2012, because it was associated with the Initiating Events cornerstone attribute of Protection Against External Factors (Fire) and adversely affected the cornerstone objective of

limiting the likelihood of those events that upset plant stability and challenge critical safety functions during plant operations. Specifically, the inspectors determined that the routing of the energized extension cord in the CS pumps area could potentially affect both redundant trains of the charging pumps located in the area; and that the transient combustible materials were routed in a combustible free zone required for separation of redundant trains because the extension cord was installed in a combustible free zone separating redundant trains required for safe shutdown. The inspectors evaluated the finding using IMC 0612, Appendix E, "Example of Minor Issues," dated August 11, 2009, and found that it was similar to Example 4.k. This finding was of very low safety significance because the installation of the extension cord represented a low degradation against the combustible controls program. The finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to coordinate the approval of a transient combustible control form with the fire protection engineer prior to routing the extension cord thru the containment spray pumps area. (H.3(b))

Inspection Report# : [2012005](#) (*pdf*)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: FIN Finding

Failure to Adequately Control Materials Classified As High Winds/Tornado Hazards

The inspectors identified a finding of very low safety significance for the licensee's failure to maintain control over the proper storage and placement of materials that were classified as high winds/tornado hazards, within the risk significant areas of the outdoors protected area, in accordance with station procedure NP 1.9.6, "Plant Cleanliness and Storage." Specifically, the inspectors identified unsecured material on wood pallets near the station transformers 1X-04 and 2X-04, which provided offsite power to both units. The licensee took immediate corrective action to remove the material. The issue was entered into the licensee's corrective action program for resolution as action request AR01788119 for evaluation and development of additional corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Initiating Events Cornerstone attribute of equipment performance and adversely affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Additionally, if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, the loose material could have affected offsite power during periods of high winds. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 1 for the Initiating Events Cornerstone, dated June 19, 2012. The inspectors answered "No" to the Exhibit 1 questions in Appendix A for transient initiators and support system initiators. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work practices, because licensee personnel did not appropriately plan work activities by incorporating job site conditions, including environmental conditions, which might have impacted plant structures, systems, and components (H.3(a)).

Inspection Report# : [2012004](#) (*pdf*)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Plant Operation With An Unacceptable ASME Code Class 2 Pressure Boundary Flaw

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR 50.55a(g)(4) because the licensee failed to identify and evaluate an American Society of Mechanical Engineers (ASME) Code Class pressure boundary flaw. Specifically, between May 22 and June 26, 2012, the licensee did not identify that leakage in the Unit 2 containment from an unknown source was from a weld in the steam generator A

blowdown line, an ASME Section XI Code Class 2 high energy component. The issue was entered into the licensee's corrective action program as action requests AR01789202 and AR01797798 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Initiating Events Cornerstone attribute of equipment performance and adversely affected the reliability of the steam generation systems (steam generator, feedwater, or main steam); thereby, directly impacting the cornerstone objective to limit the likelihood of events that upset plant stability during power operations. Specifically, the inspectors determined that any potential (and subsequently actual) failure location represented both a containment barrier during a loss of coolant accident and a reactor pressure system boundary during a steam generator tube failure event, in addition to being a potential transient initiator if the leakage became more significant. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 1 for the Initiating Events Cornerstone, dated June 19, 2012. The inspectors answered "No" to the Exhibit 1 questions in Appendix A for transient initiators and support system initiators. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, conservative assumptions. Specifically, the licensee failed to use conservative assumptions in decision making because it developed an operability evaluation demonstrating that continued full power operation was acceptable without reasonable assurance that the leakage was from a mechanical joint, rather than developing reasonable assurance or providing physical evidence, either indirectly or by observation, that the leakage was not pressure boundary leakage (H.1(b)).
Inspection Report# : [2012004](#) (pdf)

Mitigating Systems

Significance:  Jun 30, 2013

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Implement Risk Management Actions During Bus D-40 Outage

A self-revealed finding of very low safety significance and an associated non-cited violation of 10 CFR 50.65(a)(4) occurred on April 29, 2013, as a result of the licensee's failure to properly manage and assess risk during a scheduled maintenance outage for emergency diesel generator G-04. Specifically, not all ongoing maintenance activities had been taken into account in the risk assessment for the in-progress maintenance activities and an unplanned entry into yellow risk occurred when they isolated bus D-40. The licensee entered this issue into the corrective action program (CAP) as action request AR01870208. Corrective actions for this issue included restoring bus D-40 to service and initiating an evaluation of the issue through the condition reporting process.

The inspectors determined the finding to be more than minor because it was similar to Example 7.e of IMC 0612, Appendix E, "Example of Minor Issues," dated August 11, 2009, and because it was associated with the Design Control attribute of the Mitigating Systems Cornerstone. The finding also affected the Cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, and Appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process." The inspectors determined that the finding was a mitigating systems contributor; evaluated the risk deficit for each instance; and found that the issue screened as having very low safety significance. The inspectors determined that the finding has a cross-cutting aspect in the area

of human performance, work control, because the licensee failed to appropriately plan and coordinate work activities. Specifically, when the licensee attempted to remove bus D-40 isolation work from the work schedule, the work package was not updated to reflect the change; and there was a failure to communicate and/or coordinate the changes in the work scope to the appropriate groups (H.3(b)).

Inspection Report# : [2013003](#) (*pdf*)

Significance:  Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Establish Adequate Procedures to Respond to Probable Maximum Precipitation Event

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to establish an abnormal operating procedure (AOP) to respond to a flooding event and for failure to establish procedures for control and maintenance of external flooding design features for the probable maximum precipitation event as described in the FSAR. The issue was entered into the licensee's CAP as AR01856322 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Procedure Quality, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). The inspectors evaluated the finding using IMC 0609, Appendix A, Exhibit 2, for the Mitigating Systems Cornerstone, and determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, resources, because the licensee failed to maintain long term plant safety by maintenance of the external flooding design features (H.2(a)). Specifically, in the recent past, the licensee inappropriately cancelled the preventive maintenance associated with the ditches and storm drains following the completion of the drainage system study in June 2010.

Inspection Report# : [2013002](#) (*pdf*)

Significance:  Mar 31, 2013

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Safety Related Bus 2B-04 Supply Breaker Installed With Incorrect Setpoint

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed when the supply breaker to safety-related bus 2B04 tripped prematurely. Specifically, on June 6, 2011, when energizing pressurizer heaters, the feeder breaker to safety related 480 volt bus, 2B04, opened due to an over current condition; and it was later determined that the setpoint for the breaker was incorrectly set at 2000 amps versus 3000 amps as required. The issue was entered into the licensee's CAP as AR01657810. The trip setpoint on the breaker was immediately corrected, and this action restored compliance with the design requirements. Additional corrective actions were initiated to revise the maintenance procedure to list the task as a high risk activity and to add a verification step relative to the set point adjustments.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Mitigating Systems Cornerstone attribute of Human Performance, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix A, Exhibit 2, and determined a detailed risk analysis was needed. A Region III SRA performed the detailed risk evaluation and determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of

human performance, work practices, human error prevention techniques, because the licensee failed to implement peer checking techniques commensurate with the safety significance of the task (H.4(a)). Specifically, a peer check was not used to validate that the safety related trip setpoint of the bus 2B04 supply breaker was accurately set; had it been used, the peer check could have been prevented the occurrence.

Inspection Report# : [2013002](#) (*pdf*)

Significance: **G** Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Engineered Safety Feature Steam Line Pressure Dynamics Modules Discovered Outside of Technical Specification Values

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," was identified by the inspectors for the licensee's failure to incorporate a design-basis drift calculation and appropriate tolerances for calibrating the Engineered Safety Features Actuation System steam line pressure dynamic compensation modules into a calibration procedure used to assure TS requirements. The issue was entered into the licensee's CAP as AR01629378.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Mitigating Systems Cornerstone attribute of Design Control, and adversely impacted the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix A, Exhibit 2, for the Mitigating Systems Cornerstone, and determined the finding to be of very low safety significance. The finding has a cross-cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to take corrective action in a timely manner for the issue identified in previous licensee event report LER 266/2010 001 00 and the associated apparent cause evaluation. (P.1(d))

Inspection Report# : [2013002](#) (*pdf*)

Significance: **W** Mar 31, 2013

Identified By: NRC

Item Type: VIO Violation

Failure to Establish an Adequate Procedure to Implement Wave Run-Up Design Features

A WHITE finding and a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors in that from January 19, 1996 until March 13, 2013, the licensee failed to have a procedure appropriate to the circumstances to address external flooding as described in the Final Safety Analysis Report (FSAR.) Specifically, Procedure PC 80 Part 7, as implemented, would not protect safety-related equipment in the turbine building or pumphouse because the procedure (1) did not appropriately prescribe the installation of barriers such that gaps in or between the barriers were eliminated to prevent water intrusion, (2) did not protect equipment by requiring barriers to be placed in front of the doors, from 1996 to 2008, as described in the FSAR, and (3) did not require the barriers to protect the plant to an elevation of at least 9 feet (589 foot elevation) as described in the FSAR.

The performance deficiency was screened against the Reactor Oversight Process per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Procedure Quality, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee's failure to procedurally control and maintain external flooding design features and to provide procedural controls for external events could negatively impact mitigating systems' ability to respond to an external flooding event. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A, and determined a

detailed risk evaluation was needed. This finding does not present an immediate safety concern, in that, the licensee has taken corrective action and revised procedures implementing wave run-up protection features. Specifically, the licensee's procedure has been revised to direct the installation of jersey barriers in conjunction with the use of sandbags, existing jersey barriers have been modified, and sandbags and additional jersey barriers have been purchased and pre-staged. These issues are being characterized as an apparent violation in accordance with the NRC's Enforcement Policy, with its final significance to be dispositioned in separate future correspondence. This finding has a cross cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to thoroughly evaluate problems such that the resolutions address causes and extent of conditions [P.1 (c)].

Inspection Report# : [2013002](#) (*pdf*)

Inspection Report# : [2013011](#) (*pdf*)

Inspection Report# : [2013012](#) (*pdf*)

Significance:  Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Update The Fire Emergency Plan

The inspectors identified a finding of very low safety significance and associated non-cited violation of the Point Beach Nuclear Plant Renewed Facility Operating License, because the licensee failed to include electrical and physical hazards, which were installed as a result of the extended power uprate modification, in the Fire Emergency Plan (FEP). Specifically, this failure could have adversely impacted the fire brigade's ability to fight a fire in fire zones 304N and 304S. The issue was entered into the licensee's corrective action program as action request AR01833683 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating Systems Cornerstone attribute of equipment performance, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to include electrical and physical hazards in FEP 4.12, which were installed as a result of the extended power uprate modification, could have adversely impacted the fire brigade's ability to fight a fire in fire zones 304N and 304S. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, and Appendix A, "The Significance Determination Process (SDP) for Findings At Power," Exhibit 2 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "No" to the Appendix A, Exhibit 2.B question for external event mitigating systems (Seismic/Fire/Flood/Severe Weather Protection Degraded). Therefore, inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to coordinate the work activities associated with the extended power uprate modification such that the impact of the modification was evaluated against all applicable programs, including fire protection, consistent with nuclear safety. (H.3(a))

Inspection Report# : [2012005](#) (*pdf*)

Significance:  Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Scoping Of A Non-Safety-Related System Into The Maintenance Rule

- The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR 50.65(b)(2)(i), because the licensee failed to adequately scope a non-safety-related component relied upon to mitigate accidents or transients. Specifically, the licensee failed to include the non-safety-related electrohydraulic control

system over pressure delta temperature (OP?T) and over temperature delta temperature (OT?T) automatic runback features, as part of their maintenance effectiveness monitoring program. The issue was entered into the licensee's corrective action program as action request AR01804588 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating Systems Cornerstone attribute of equipment performance, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, failure to monitor the performance or condition of the electrohydraulic control system could impact the ability of the system to initiate a runback and respond to an event in the desired manner. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, and Appendix A, "The Significance Determination Process (SDP) for Findings At Power," Exhibit 2 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "No" to the Appendix A, Exhibit 1 questions for mitigating structures, systems, and components, and functionality. Therefore, inspectors determined the finding to be of very low safety significance. The inspectors determined that since the scoping of the systems had occurred more than two years in the past, and the opportunity to reevaluate system scoping had not occurred recently, that the finding did not represent current plant performance, and therefore did not have a cross-cutting aspect associated with it.

Inspection Report# : [2012005](#) (*pdf*)

Significance:  Dec 31, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Condition Prohibited by Technical Specification 3.8.2, AC Sources-Shutdown

A finding of very low safety significance and associated NCV of TS 3.8.2, Condition B, Required Action 1 (Immediately) was self revealed when the licensee's outage related activities rendered both Unit 2 safety related buses inoperable. Specifically, the licensee's outage related activities involved tagging out direct current control power to Unit 2 train A and train B safeguards relay circuitry in order to support termination of wiring. The issue was entered into the licensee's corrective action program as action request AR01639531 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating Systems Cornerstone attribute of Design Control, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process (SDP) for Findings At-Power," Exhibit 1 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "Yes" to Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. The inspectors determined the finding to be of very low safety significance because at no point were all four emergency diesel generators inoperable. The finding has a cross cutting aspect in the area of human performance, work practices, human error prevention techniques, because the licensee failed to validate the impact of the underlying assumptions associated with the clearance orders on the technical specification requirements so that the equipment affected were not rendered inoperable (H.4(a)). (Section 40A3.6)

Inspection Report# : [2012005](#) (*pdf*)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Implement Risk Management Actions During Various Emergent Work Activities

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR 50.65 (a)(4) because the licensee failed to properly manage and assess risk for various emergent work activities. Specifically, the licensee failed to manage the risk associated with the gas turbine generator (G-05) failure out of service duration, the G-05 unavailability when on the turning gear, and the Unit 1 turbine electrohydraulic control (EHC) system in manual. The issue was entered into the licensee's corrective action program as action requests AR01808661 and AR01787706 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because the failure to properly manage and assess risk, if left uncorrected, would have the potential to become a more significant safety concern. Specifically, the inspectors determined that the addition of a Unit 1 transient initiator and of G-05 modeled as out of service into the licensee's safety monitor program for risk was more than minor because the licensee's risk assessment was based on incorrect assumptions that changed the outcome of the assessment. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix K, "Maintenance Risk Assessment And Risk Management Significance Determination Process," dated May 19, 2005. The inspectors determined that the finding was a mitigating systems contributor, evaluated the risk deficit for each instance, and found that the issue screened as having very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to define and effectively communicate expectations regarding procedural compliance and ensure personnel follow procedures. Specifically, in all instances the licensee failed to communicate expectations regarding compliance as required by station nuclear procedure (NP) 1.1.4, and ensure personnel followed implementing procedure NP 10.3.7, for risk management (H.4(b)).

Inspection Report# : [2012004](#) (*pdf*)

Significance: G Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Weld Design Deficiency In Emergency Diesel Generator Missile Protection Barriers

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for a deficiency in weld evaluations in the licensee design calculation of the new missile protection steel barriers. These barriers were installed for protection of the emergency diesel generators G-01 and G-02 exhaust pipes from a tornado missile strike. Specifically, the inspectors identified two examples where critical welds were not adequately addressed in the calculation. The issue was entered into the licensee's corrective action program as action requests AR01771762 and AR01772431 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," and Appendix E, "Example of Minor Issues," dated August 11, 2009, and found that it was similar to Example 3a and it was associated with the Mitigating Systems Cornerstone attribute of Design Control and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 1 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "Yes" to Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to ensure supervisory oversight of the contractor activities to support nuclear safety. Specifically, in the examples noted, the licensee failed to

adequately review the calculation performed by the contractor to verify that the assumptions and engineering judgments were adequately justified and consistent with the installation (H.4(c)).

Inspection Report# : [2012004](#) (pdf)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Transient Materials Not Removed From Containment Prior To Reactor Startup

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to remove a plastic bag of transient materials that could interact with the containment sump recirculation strainer. Specifically, while performing the containment closure inspection prior to reactor startup, the inspectors identified a large plastic bag containing mop heads and cleaning materials that, if left in containment, could interact with the containment recirculation sump suction strainer. The licensee took immediate corrective action to remove the items from containment. The issue was entered into the licensee's corrective action program for resolution as action requests AR01781331 and AR01808631 for evaluation and development of additional corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating System Cornerstone attribute of equipment performance and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the low head safety injection system availability and reliability could be reduced by material clogging the recirculation sump suction strainer. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 2 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "Yes" to Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. Therefore, inspectors determined the finding to be of very low safety significance. The finding did not have a cross-cutting aspect because the cause was identical to the cause for the boric acid not being removed from containment isolation valve 2SC-955, as required by procedure, an issue also identified during the inspection, and the cross cutting aspect was captured by that issue.

Inspection Report# : [2012004](#) (pdf)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Incorporate WOG ERG, Revision 2, Into The EOPs

The inspectors identified a finding of very low safety significance and associated non-cited violation of Technical Specification 5.4, "Procedures." Specifically, the licensee failed to maintain its emergency operating procedures (EOPs) with the safety significant changes provided in the Westinghouse Owners Group Emergency Response Guidelines (WOG ERGs), Revision 2. The issue was entered in the licensee's corrective action program as action request AR01779635 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating Systems Cornerstone attribute of procedure quality and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the inspectors determined that the failure to update EOPs to implement Revision 2 of the WOG ERGs significantly beyond the current industry standard of two years would result in a delay when terminating

Primary To Secondary Leakage during a steam generator tube rupture event. The inspectors evaluated the finding using IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Initial Characterization of Findings,” Tables 2 and 3, dated June 19, 2012, and Appendix A, “The Significance Determination Process (SDP) for Findings At-Power,” Exhibit 2 for the the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered “Yes” to Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, resources, because the licensee failed to assure resources were available and adequate to complete the WOG ERG, Revision 2 EOP updates in a timely manner commensurate with risk and safety (H.2(c)).

Inspection Report# : [2012004](#) (pdf)

Barrier Integrity

Significance: G Jun 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Lack of Acceptance Criteria for Containment Visual Examinations

The inspectors identified a non-cited violation of 10 CFR 50.55a(g)(4), for failure to define acceptance criteria for containment visual examinations. Consequently, active containment liner degradation (pitting) was identified and the liner returned to service without defined criteria for accepting this condition. The licensee entered this issue into the corrective action program (CAP) as action requests AR01858862 and AR01861158, and developed visual examination acceptance criteria to restore compliance with this NRC regulation.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, “Issue Screening” dated September 7, 2012, because it adversely affected the Barrier Integrity Cornerstone attribute of maintaining the functional integrity of containment. The inspectors also answered “Yes” to the more than minor screening question, “If left uncorrected, would the performance deficiency have the potential to lead to a more significant safety concern?” Specifically, the lack of acceptance criteria in site procedures for containment visual examinations would become a more significant safety concern in that active liner degradation may not be properly evaluated and/or promptly corrected, resulting in a containment liner breach. In accordance with Table 2, “Cornerstones Affected by Degraded Condition or Programmatic Weakness,” of IMC 0609, Attachment 4, “Initial Characterization of Findings,” issued June 19, 2012, the inspectors checked the box under the Barrier Integrity Cornerstone because the corrosion induced pitting degraded the containment barrier. The inspectors determined this finding was of very low safety significance based on answering “No” to the Exhibit 3, “Barrier Integrity Screening Questions,” in IMC 0609, Attachment A, “The Significance Determination Process (SDP) for Findings At Power,” issued on June 19, 2012. Specifically, the inspectors answered “No” to the screening question associated with an actual open pathway (e.g., breach) in the containment and “No” to the question associated with reduction in function of hydrogen igniters in containment. The inspectors determined that the primary cause of the failure to define containment visual examination acceptance criteria was related to the cross-cutting component of human performance, decision-making, because licensee staff did not apply a systematic process, when faced with unexpected plant conditions, to ensure safety was maintained. Specifically, a systematic process for developing acceptance criteria was not applied for the containment visual examinations (H.1(a)).

Inspection Report# : [2013003](#) (pdf)

Significance: G Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Response for Loss of Spent Fuel Pool Cooling Did Not Consider the Most Limited Time to Boil

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the licensee's failure to account for the most limiting spent fuel pool (SFP) time to boil in calculations and procedures. Specifically, the service water design-basis analysis and abnormal operating procedure (AOP) for loss of SFP cooling used a time to boil value based on non-limiting conditions. The issue was entered into the licensee's CAP as AR01852528 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Barrier Integrity Cornerstone, in that, if left uncorrected, it would have lead to a more significant safety concern. The inspectors evaluated the finding using IMC 0609, Appendix A, Exhibit 3, for the Barrier Integrity Cornerstone, and determined the significance of this finding could be evaluated using qualitative criteria in accordance with IMC 0609, Appendix M. With consultation of an RIII SRA, the inspectors determined the finding screened as of very low safety significance because it involved a design-basis event (e.g., loss of cooling accident (LOCA)) on one unit occurring during a short window of time when the SFP is subjected to the maximum allowed heat load shortly after the other unit is defueled. The inspectors did not identify a cross-cutting aspect associated with this finding because the finding was not confirmed to reflect current performance due to the age of the performance deficiency.

Inspection Report# : [2013002](#) (*pdf*)

Significance: G Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Boric Acid Not Removed From Containment Isolation Valve As Required by Procedure

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to clean boric acid from the Unit 2 reactor coolant system hot leg sample isolation valve 2SC-955. Specifically, during the containment closeout tour performed by the inspectors, the inspectors identified that boric acid leakage on valve 2SC-955 had not been cleaned as required by the boric acid program. The licensee subsequently cleaned the valve prior to restart of the reactor and entered the issue into its corrective action program for resolution as action requests AR01782290, AR01765986, AR01780951, and AR01797802, for evaluation and development of additional corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Barrier Integrity Cornerstone attribute of reactor coolant system equipment and barrier performance and adversely affected the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Additionally, if left uncorrected, it could impact the operators' ability to verify a containment isolation actuation, thereby adversely affecting the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 2 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "Yes" to Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. Therefore, the inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, systematic processes, because the licensee failed to use a systematic process when making decisions related to the cleaning of boric acid components during the unplanned shutdown. Specifically, the licensee's communications and interfaces for performing the activities and developing corrective actions were not approached rigorously and systematically when the duration of the unplanned outage was significantly shortened, and plant startup timelines modified the expected

boric acid cleaning plans (H.1(a)).
Inspection Report# : [2012004](#) (pdf)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedural Guidance For Heavy Loads Operations

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to have adequate procedures in place to ensure that heavy loads were operated safely within the primary auxiliary building (PAB). Specifically, the inspectors determined that the licensee failed to incorporate minimum crane operating temperature limits into procedures to avoid brittle fracture of structural components below the nil-ductility transition temperature. The issue was entered into the licensee's corrective action program for resolution as action request AR01783306 for evaluation and development of corrective actions which included revising procedures to identify the minimum operating temperature of the PAB crane.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Barrier Integrity Cornerstone attribute of procedure quality and adversely affected the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events because a PAB crane heavy load drop could cause damage to spent fuel. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, dated June 19, 2012, and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 3 for the Barrier Integrity Cornerstone, dated June 19, 2012. The inspectors answered "No" to Exhibit 3 questions in Appendix A for the spent fuel pool. Therefore, the inspectors determined the finding to be of very low safety significance. In accordance with IMC 0612, Section 06.03.c, a cross-cutting aspect will not be assigned to this finding as it has occurred outside of the nominal three-year period and is not representative of present performance.

Inspection Report# : [2012004](#) (pdf)

Emergency Preparedness

Occupational Radiation Safety

Significance:  Mar 31, 2013

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Survey for Neutron Dose from Source Storage

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR 20.1501 was self-revealed when the licensee failed to evaluate dose to personnel from neutron radiation. Specifically, on September 5, 2012, it was self revealed to the licensee that unevaluated neutron dose was present in an office area located outside the Radiologically Controlled Area (RCA) due to a source storage room housing a neutron source. This issue was entered into the licensee's CAP as AR01809560. Corrective actions included moving the neutron source into the RCA, performing a condition evaluation, and performing dose estimates to various plant personnel.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because the finding was associated with the Occupational and Public Radiation Safety Cornerstones and adversely affected the cornerstones objective. The inspectors evaluated the finding using IMC 0609, Appendix D, for the Public Radiation Safety Cornerstone, and determined the finding to be of very low safety significance. The finding had a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to ensure supervisory and management oversight of work activities such that nuclear safety is supported (H.4(c)). Specifically, the licensee did not provide supervisory oversight to ensure that the survey program was sufficient to ensure compliance with 10 CFR Part 20 requirements.

Inspection Report# : [2013002](#) (*pdf*)

Significance:  Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Implement And Maintain Procedures Regarding Breathing Air Quality

The inspectors identified a finding of very low safety significance (Green) and associated non-cited violation of 10 CFR 20.1703 for the failure to implement and maintain written procedures regarding breathing air quality which resulted in the failure to perform breathing air quality tests since December 2011. This issue was entered into the licensee's corrective action program (CAP) as AR01821842. An air quality test was subsequently performed resulting in grade "D" or better air and a review of past air compressor maintenance was performed to provide adequate assurance that breathing air met the grade "D" requirements since the last test in December 2011. The licensee has also made necessary procedural changes to ensure air quality tests are performed on a quarterly basis.

The performance deficiency was determined to be of more than minor safety significance in accordance with IMC 0612, Appendix B, "Issue Screening," because if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, continued failure to test for breathing air quality could have resulted in unbreathable air being introduced into the licensee's SCBAs and control room emergency breathing air system. The inspectors also reviewed the guidance in IMC 0612, Appendix E, "Examples of Minor Issues," and did not find any similar examples. In accordance with IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," the inspectors determined that the finding had very low safety significance (Green) because the finding did not involve: (1) ALARA planning and controls, (2) a radiological overexposure, (3) a substantial potential for an overexposure, or (4) a compromised ability to assess dose. The primary cause of this finding was related to the cross-cutting aspect of human performance with the component of decision making in that the licensee communicates decisions and the basis for decisions to personnel who have a need to know the information in order to perform the work safely, in a timely manner. (H.1(c))

Inspection Report# : [2012005](#) (*pdf*)

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related

information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: N/A Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Update the External Flooding Mitigation Features in the FSAR

An SL-IV NCV of 10 CFR Part 50.71(e), "Maintenance of Records, Making of Reports," was identified by the inspectors for the licensee's failure to comply with the requirements to periodically update the FSAR to include an accurate description of the flooding design and credited mitigation features for the site as a result of a modification made to the plant. The issue was entered into the licensee's CAP as AR01819241 for evaluation and development of corrective actions.

The inspectors used IMC 0612, Appendix B, and determined the performance deficiency could be dispositioned using traditional enforcement. Specifically, the inspectors determined that the issue was considered for traditional enforcement because it had the potential for impacting the NRC's ability to perform its regulatory function. The inspectors concluded that the finding is more than minor because, if left uncorrected, this could lead to a more significant safety concern because future changes to the facility, procedures, and programs would not consider the licensing basis information that was removed or never inserted. The finding was determined to be an SL IV violation using Section 6.1 of the NRC's Enforcement Policy because the inaccurate information was not used to make an unacceptable change to the facility or procedures. Since this performance deficiency was dispositioned using traditional enforcement, there is no cross-cutting aspect assigned.

Inspection Report# : [2013002](#) (*pdf*)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Manager Working Outage Hours Contrary To Guidance

The inspectors identified a Severity Level IV non-cited violation and associated finding of very low safety significance of 10 CFR 26.207(a), "Waivers," for the licensee's failure to perform multiple activities as required when licensed reactor operators in the shift manager (SM) position worked outage hours during the Unit 1 outage in fall 2011. Specifically, for each circumstance where an SM exceeded operating hours, the licensee did not meet the following requirements: a determination that the waiver is necessary to mitigate or prevent a condition adverse to safety; a face to face assessment of the individual to determine that there was reasonable assurance that the individual would be able to safely and competently perform his or her duties during the additional work period for which the waiver will be granted; and a circumstance did not exist that could not have been reasonably controlled because additional personnel could have been added to the shift to perform the related outage activities. The issue was entered into the licensee's corrective action program for resolution as action request AR01797782, for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because if left uncorrected, the exclusion of workers from work hour controls could have led to a more significant safety concern due to personnel exceeding work hour limits while performing safety related or risk significant activities. Specifically, without proper fatigue assessments, incorrect assessment or directions could be provided by the SM for routine activities or during

transient/emergency response. The inspectors evaluated the finding using IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Initial Characterization of Findings,” Tables 2 and 3, dated June 19, 2012, and Appendix M, “Significance Determination Process Using Qualitative Criteria,” dated April 12, 2012. The inspectors determined that the finding was of very low safety significance because no deficiencies which affected risk significant structures, systems, or components occurred as a result of SM fatigue. This finding has a cross-cutting aspect in the area of problem identification and resolution, self and independent assessment, because the licensee failed to conduct sufficient in-depth self assessments. Specifically, the licensee conducted a self assessment of the fatigue rule annually with its corporate licensing department giving the licensee the prior opportunity to identify and correct this issue had the self assessments been more rigorous (P.3(a)).

Inspection Report# : [2012004](#) (*pdf*)

Significance: N/A Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Perform Adequate Evaluations To Ensure Compliance With 10 CFR 72.212(b)(6) And 10 CFR 72.122(b)(2)(i)

The inspectors identified a Severity Level IV non-cited violation of 10 CFR 72.146, “Design Control,” for the licensee’s failure to perform adequate evaluations to ensure compliance with 10 CFR 72.122(b)(2)(i) and 10 CFR 72.212(b)(6). Specifically, the inspectors identified that the licensee failed to evaluate that the reactor site parameters, including analyses of earthquakes, were enveloped by the transfer cask design basis. The issue was entered into the licensee’s corrective action program for resolution as action request AR01780357, for evaluation and development of corrective actions.

The violation was determined to be more than minor in accordance with IMC 0612, “Power Reactor Inspection Reports,” Appendix B, “Issue Screening,” and Appendix E, “Example of Minor Issues,” dated August 11, 2009, and found that it was similar to Example 3i. Specifically, the licensee’s lack of evaluation did not assure cask integrity during a design basis earthquake and an additional calculation was required to evaluate the effects of the design basis earthquake during dry shielded canister processing operations in the primary auxiliary building on the cask decontamination stand in accordance with the Independent Spent Fuel Storage Installation (ISFSI) licensing/design basis analysis requirements. Consistent with the guidance in the NRC Enforcement Manual, Section 2.6.D, if a violation does not fit an example in the enforcement policy violation examples, it should be assigned a severity level: (1) commensurate with its safety significance; and, (2) informed by similar violations addressed in the Violation Examples. Therefore, the inspectors determined violation screened as having very low safety significance (Severity Level IV). Specifically, following the inspection inquiry the licensee revised their calculations and determined that overturning and sliding of the transfer cask in the primary auxiliary building on the cask decontamination stand and in the spent fuel pool would not occur during the design basis earthquake. In accordance with Section 2.2 of the NRC Enforcement Policy, ISFSIs are not subject to the Significance Determination Process (SDP) and, thus, traditional enforcement will be used for these facilities and thus a cross-cutting aspect is not assigned to this violation. In accordance with Section 2.2 of the NRC Enforcement Policy, ISFSIs are not subject to the SDP and, thus, traditional enforcement will be used for these facilities and thus a cross-cutting aspect is not assigned to this violation.

Inspection Report# : [2012004](#) (*pdf*)

Last modified : September 03, 2013

Point Beach 2

3Q/2013 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2013

Identified By: NRC

Item Type: FIN Finding

Failure to Control Materials Classified as High Winds/Tornado Hazards

The inspectors identified a finding of very low safety significance for the licensee's failure to maintain control over the proper storage and placement of materials that were classified as high winds/tornado hazards, in accordance with procedure NP 1.9.6, "Plant Cleanliness and Storage." Specifically, the inspectors identified that the licensee failed to perform weekly high wind missile hazards inspections since April 17, 2013. As a result, unsecured wooden pallets, wooden planks, metal rods and a metallic desk were discovered by the inspectors near Units 1 and 2 transformer areas. The issue was entered into the licensee's corrective action program (CAP) for resolution as action request AR01882921. The licensee took immediate corrective action to remove and/or properly store the material after the tornado warning on June 17, 2013.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, because if left uncorrected, the unsecured items would have the potential to lead to a more significant safety concern during high wind and tornado events. The inspectors determined the finding to be of very low safety significance because the inspectors answered "No" to each question listed in IMC 0609, Appendix A, Exhibit 1, "Initiating Event Screening Questions." The inspectors determined that the finding has a cross cutting aspect in the area of human performance, work practices, because the licensee did not provide supervisory or management oversight of work activities such that nuclear safety was supported. Specifically, the licensee failed to provide appropriate oversight of work activities such that, when the program owner of the weekly high wind inspection changed, the requirement to perform weekly high winds tornado hazard walkdowns was not understood (H.4(c)).

Inspection Report# : [2013003](#) (*pdf*)

Significance:  Jun 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Operability Evaluation Process Following Water Leakage into the Control Room

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 50, Appendix B, Criterion V for the licensee's failure to follow procedure EN AA 203 1001, "Operability Determinations/Functionality Assessments." Specifically, following water leakage into the control room, the licensee's immediate operability determination failed to evaluate the effect the leakage had on the control room envelope operability. Additionally, the licensee did not address the functionality of the degraded flood barrier and its impact on operability. This issue was entered into the corrective action program (CAP) as AR01877185. Corrective actions for this issue included performing a test of the control room envelope to demonstrate that appropriate positive pressure could be maintained with the known degraded barrier, and repair of the degraded flood barrier following performance of a functionality assessment.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Protection Against External Factors attribute of the Initiating Event Cornerstone, and

adversely affected the Cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during power operations. The inspectors determined the finding to be of very low safety significance in accordance with IMC 0609, Appendix A, Exhibit 1, because they answered “No” to the questions under Transient Initiators and External Event Initiators. The inspectors concluded that this finding has a cross-cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to thoroughly evaluate this problem such that the resolution addressed the cause and evaluated the condition for operability (P.1(c)).

Inspection Report# : [2013003](#) (*pdf*)

Significance:  Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Properly Implement a Compensatory Fire Watch As Required by the Fire Protection Program

A finding of very low safety significance and an associated non-cited violation (NCV) of Technical Specification (TS) 5.4.1.h, “Fire Protection Implementation,” for Units 1 and 2, was identified by the inspectors for the licensee’s failure to implement compensatory fire watches for multiple fire zones in the plant auxiliary building, in accordance with the fire protection program requirements. Specifically, the licensee failed to implement the guidelines for compensatory fire watches as described in Operations Manual (OM) 3.27, “Control of Fire Protection and Appendix R Safe Shutdown Equipment” for the affected fire zones. The issue was entered into the licensee’s corrective action program (CAP) as AR01855430.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Initiating Events Cornerstone attribute of Protection Against External Factors (Fire) and adversely affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during plant operations. The inspectors evaluated the finding using IMC 0609, Appendix F, because the finding degraded the ability to adequately implement fire prevention and administrative controls affecting the ability to reach and maintain safe shutdown capabilities. A Region III (RIII) Senior Reactor Analyst (SRA) performed a modified Phase 2 evaluation and determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to define and effectively communicate expectations regarding procedural compliance and personnel did not follow procedures (H.4(b)). Specifically, the expectation for procedural compliance, for when the fire zones become high radiation areas requires that fire rounds are to be performed by Operations instead of security.

Inspection Report# : [2013002](#) (*pdf*)

Significance:  Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Unauthorized Transient Combustibles

The inspectors identified a finding of very low safety significance and associated non-cited violation of Technical Specification 5.4.1.h for Units 1 and 2 for the licensee’s failure to control transient combustible materials in accordance with the fire protection program requirements. Specifically, the licensee failed to implement the guidelines specified in Procedure NP 1.9.9, “Transient Combustible Control,” when they installed an energized extension cord (combustible material) for temporary lighting in a combustible exclusion area located in fire zone 151. Upon discovery, the licensee relocated the extension cord and placed the issue into their corrective action program as action request AR01811414.

The inspectors determined that this finding was more than minor in accordance in accordance with IMC 0612, Appendix B, “Issue Screening,” dated September 7, 2012, because it was associated with the Initiating Events cornerstone attribute of Protection Against External Factors (Fire) and adversely affected the cornerstone objective of

limiting the likelihood of those events that upset plant stability and challenge critical safety functions during plant operations. Specifically, the inspectors determined that the routing of the energized extension cord in the CS pumps area could potentially affect both redundant trains of the charging pumps located in the area; and that the transient combustible materials were routed in a combustible free zone required for separation of redundant trains. because the extension cord was installed in a combustible free zone separating redundant trains required for safe shutdown. The inspectors evaluated the finding using IMC 0612, Appendix E, "Example of Minor Issues," dated August 11, 2009, and found that it was similar to Example 4.k. This finding was of very low safety significance because the installation of the extension cord represented a low degradation against the combustible controls program. The finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to coordinate the approval of a transient combustible control form with the fire protection engineer prior to routing the extension cord thru the containment spray pumps area. (H.3(b))

Inspection Report# : [2012005](#) (*pdf*)

Mitigating Systems

Significance:  Jun 30, 2013

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Implement Risk Management Actions During Bus D-40 Outage

A self-revealed finding of very low safety significance and an associated non-cited violation of 10 CFR 50.65(a)(4) occurred on April 29, 2013, as a result of the licensee's failure to properly manage and assess risk during a scheduled maintenance outage for emergency diesel generator G-04. Specifically, not all ongoing maintenance activities had been taken into account in the risk assessment for the in-progress maintenance activities and an unplanned entry into yellow risk occurred when they isolated bus D-40. The licensee entered this issue into the corrective action program (CAP) as action request AR01870208. Corrective actions for this issue included restoring bus D-40 to service and initiating an evaluation of the issue through the condition reporting process.

The inspectors determined the finding to be more than minor because it was similar to Example 7.e of IMC 0612, Appendix E, "Example of Minor Issues," dated August 11, 2009, and because it was associated with the Design Control attribute of the Mitigating Systems Cornerstone. The finding also affected the Cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, and Appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process." The inspectors determined that the finding was a mitigating systems contributor; evaluated the risk deficit for each instance; and found that the issue screened as having very low safety significance. The inspectors determined that the finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to appropriately plan and coordinate work activities. Specifically, when the licensee attempted to remove bus D-40 isolation work from the work schedule, the work package was not updated to reflect the change; and there was a failure to communicate and/or coordinate the changes in the work scope to the appropriate groups (H.3(b)).

Inspection Report# : [2013003](#) (*pdf*)

Significance:  Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Establish Adequate Procedures to Respond to Probable Maximum Precipitation Event

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to establish an abnormal operating procedure (AOP) to respond to a flooding event and for failure to establish procedures for control and maintenance of external flooding design features for the probable maximum precipitation event as described in the FSAR. The issue was entered into the licensee's CAP as AR01856322 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Procedure Quality, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). The inspectors evaluated the finding using IMC 0609, Appendix A, Exhibit 2, for the Mitigating Systems Cornerstone, and determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, resources, because the licensee failed to maintain long term plant safety by maintenance of the external flooding design features (H.2(a)). Specifically, in the recent past, the licensee inappropriately cancelled the preventive maintenance associated with the ditches and storm drains following the completion of the drainage system study in June 2010.

Inspection Report# : [2013002](#) (pdf)

Significance:  Mar 31, 2013

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Safety Related Bus 2B-04 Supply Breaker Installed With Incorrect Setpoint

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed when the supply breaker to safety-related bus 2B04 tripped prematurely. Specifically, on June 6, 2011, when energizing pressurizer heaters, the feeder breaker to safety related 480 volt bus, 2B04, opened due to an over current condition; and it was later determined that the setpoint for the breaker was incorrectly set at 2000 amps versus 3000 amps as required. The issue was entered into the licensee's CAP as AR01657810. The trip setpoint on the breaker was immediately corrected, and this action restored compliance with the design requirements. Additional corrective actions were initiated to revise the maintenance procedure to list the task as a high risk activity and to add a verification step relative to the set point adjustments.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Mitigating Systems Cornerstone attribute of Human Performance, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix A, Exhibit 2, and determined a detailed risk analysis was needed. A Region III SRA performed the detailed risk evaluation and determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work practices, human error prevention techniques, because the licensee failed to implement peer checking techniques commensurate with the safety significance of the task (H.4(a)). Specifically, a peer check was not used to validate that the safety related trip setpoint of the bus 2B04 supply breaker was accurately set; had it been used, the peer check could have been prevented the occurrence.

Inspection Report# : [2013002](#) (pdf)

Significance:  Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Engineered Safety Feature Steam Line Pressure Dynamics Modules Discovered Outside of Technical

Specification Values

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," was identified by the inspectors for the licensee's failure to incorporate a design-basis drift calculation and appropriate tolerances for calibrating the Engineered Safety Features Actuation System steam line pressure dynamic compensation modules into a calibration procedure used to assure TS requirements. The issue was entered into the licensee's CAP as AR01629378.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Mitigating Systems Cornerstone attribute of Design Control, and adversely impacted the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix A, Exhibit 2, for the Mitigating Systems Cornerstone, and determined the finding to be of very low safety significance. The finding has a cross-cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to take corrective action in a timely manner for the issue identified in previous licensee event report LER 266/2010 001 00 and the associated apparent cause evaluation. (P.1(d))

Inspection Report# : [2013002](#) (*pdf*)

Significance: **W** Mar 31, 2013

Identified By: NRC

Item Type: VIO Violation

Failure to Establish an Adequate Procedure to Implement Wave Run-Up Design Features

A WHITE finding and a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors in that from January 19, 1996 until March 13, 2013, the licensee failed to have a procedure appropriate to the circumstances to address external flooding as described in the Final Safety Analysis Report (FSAR.) Specifically, Procedure PC 80 Part 7, as implemented, would not protect safety-related equipment in the turbine building or pumphouse because the procedure (1) did not appropriately prescribe the installation of barriers such that gaps in or between the barriers were eliminated to prevent water intrusion, (2) did not protect equipment by requiring barriers to be placed in front of the doors, from 1996 to 2008, as described in the FSAR, and (3) did not require the barriers to protect the plant to an elevation of at least 9 feet (589 foot elevation) as described in the FSAR.

The performance deficiency was screened against the Reactor Oversight Process per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Procedure Quality, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee's failure to procedurally control and maintain external flooding design features and to provide procedural controls for external events could negatively impact mitigating systems' ability to respond to an external flooding event. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A, and determined a detailed risk evaluation was needed. This finding does not present an immediate safety concern, in that, the licensee has taken corrective action and revised procedures implementing wave run-up protection features. Specifically, the licensee's procedure has been revised to direct the installation of jersey barriers in conjunction with the use of sandbags, existing jersey barriers have been modified, and sandbags and additional jersey barriers have been purchased and pre-staged. These issues are being characterized as an apparent violation in accordance with the NRC's Enforcement Policy, with its final significance to be dispositioned in separate future correspondence. This finding has a cross cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to thoroughly evaluate problems such that the resolutions address causes and extent of conditions [P.1 (c)].

Inspection Report# : [2013002](#) (*pdf*)

Inspection Report# : [2013011](#) (*pdf*)

Inspection Report# : [2013012](#) (*pdf*)

Significance:  Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Update The Fire Emergency Plan

The inspectors identified a finding of very low safety significance and associated non-cited violation of the Point Beach Nuclear Plant Renewed Facility Operating License, because the licensee failed to include electrical and physical hazards, which were installed as a result of the extended power uprate modification, in the Fire Emergency Plan (FEP). Specifically, this failure could have adversely impacted the fire brigade's ability to fight a fire in fire zones 304N and 304S. The issue was entered into the licensee's corrective action program as action request AR01833683 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating Systems Cornerstone attribute of equipment performance, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to include electrical and physical hazards in FEP 4.12, which were installed as a result of the extended power uprate modification, could have adversely impacted the fire brigade's ability to fight a fire in fire zones 304N and 304S. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, and Appendix A, "The Significance Determination Process (SDP) for Findings At Power," Exhibit 2 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered "No" to the Appendix A, Exhibit 2.B question for external event mitigating systems (Seismic/Fire/Flood/Severe Weather Protection Degraded). Therefore, inspectors determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to coordinate the work activities associated with the extended power uprate modification such that the impact of the modification was evaluated against all applicable programs, including fire protection, consistent with nuclear safety. (H.3(a))

Inspection Report# : [2012005](#) (*pdf*)

Significance:  Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Scoping Of A Non-Safety-Related System Into The Maintenance Rule

- The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR 50.65(b)(2)(i), because the licensee failed to adequately scope a non-safety-related component relied upon to mitigate accidents or transients. Specifically, the licensee failed to include the non-safety-related electrohydraulic control system over pressure delta temperature (OP?T) and over temperature delta temperature (OT?T) automatic runback features, as part of their maintenance effectiveness monitoring program. The issue was entered into the licensee's corrective action program as action request AR01804588 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it was associated with the Mitigating Systems Cornerstone attribute of equipment performance, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, failure to monitor the performance or condition of the electrohydraulic control system could impact the ability of the system to initiate a runback and respond to an event in the desired manner. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment

0609.04, “Initial Characterization of Findings,” Tables 2 and 3, and Appendix A, “The Significance Determination Process (SDP) for Findings At Power,” Exhibit 2 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered “No” to the Appendix A, Exhibit 1 questions for mitigating structures, systems, and components, and functionality. Therefore, inspectors determined the finding to be of very low safety significance. The inspectors determined that since the scoping of the systems had occurred more than two years in the past, and the opportunity to reevaluate system scoping had not occurred recently, that the finding did not represent current plant performance, and therefore did not have a cross-cutting aspect associated with it.

Inspection Report# : [2012005](#) (*pdf*)

Significance:  Dec 31, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Condition Prohibited by Technical Specification 3.8.2, AC Sources-Shutdown

A finding of very low safety significance and associated NCV of TS 3.8.2, Condition B, Required Action 1 (Immediately) was self revealed when the licensee’s outage related activities rendered both Unit 2 safety related buses inoperable. Specifically, the licensee’s outage related activities involved tagging out direct current control power to Unit 2 train A and train B safeguards relay circuitry in order to support termination of wiring. The issue was entered into the licensee’s corrective action program as action request AR01639531 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, “Power Reactor Inspection Reports,” Appendix B, “Issue Screening,” dated September 7, 2012, because it was associated with the Mitigating Systems Cornerstone attribute of Design Control, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, “Significance Determination Process (SDP) for Findings At-Power,” Exhibit 1 for the Mitigating Systems Cornerstone, dated June 19, 2012. The inspectors answered “Yes” to Exhibit 2, Question A.1 in Appendix A for mitigating structures, systems, and components, and functionality. The inspectors determined the finding to be of very low safety significance because at no point were all four emergency diesel generators inoperable. The finding has a cross cutting aspect in the area of human performance, work practices, human error prevention techniques, because the licensee failed to validate the impact of the underlying assumptions associated with the clearance orders on the technical specification requirements so that the equipment affected were not rendered inoperable (H.4(a)). (Section 40A3.6)

Inspection Report# : [2012005](#) (*pdf*)

Barrier Integrity

Significance:  Sep 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Operability/Functionality Evaluation Process Following Radiation Monitor Failure

The inspectors identified a finding of very low safety significance and an associated NCV of 10 CFR Part 50, Appendix B, Criterion V, for the licensee’s failure to follow procedure EN AA 203 1001, “Operability Determinations/Functionality Assessments.” Specifically, when the Unit 1 main steam line A release monitor, 1RE 232, went into high alarm due to high ambient temperatures, the licensee’s immediate functionality determination failed to evaluate the potential impact of the degraded state of the radiation monitor in the emergency plan.

Additionally, a functionality assessment was not requested as specified by the procedure. This issue was entered into the licensee's corrective action program (CAP) as action request (AR) 01902921.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, because if left uncorrected, the failure to perform operability and functionality evaluations, and to recognize conditions that could render equipment inoperable, had the potential to lead to a more significant concern. The inspectors determined that the finding was associated with the Barrier Integrity Cornerstone, because the main steam line radiation monitor provides reasonable assurance that physical design barriers protect the public from radionuclide releases. The inspectors determined the finding to be of very low safety significance in accordance with IMC 0609, Appendix A, Exhibit 1, because they answered "No" to the questions under the Barrier Integrity screening questions. The inspectors concluded that this finding has a cross-cutting aspect in the area of human performance, decision making, because the licensee failed to use conservative assumptions in decision making after the receipt of the unexpected high alarm on 1RE 232 and did not request a functionality assessment to ensure that the condition and proposed actions were fully understood. Specifically, operations personnel did not request a documented evaluation to support understanding why the alarming monitor did not affect the functionality of the instrument as it related to the instrument's emergency plan functions. (H.1 (b))

Inspection Report# : [2013004](#) (*pdf*)

Significance:  Jun 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Lack of Acceptance Criteria for Containment Visual Examinations

The inspectors identified a non-cited violation of 10 CFR 50.55a(g)(4), for failure to define acceptance criteria for containment visual examinations. Consequently, active containment liner degradation (pitting) was identified and the liner returned to service without defined criteria for accepting this condition. The licensee entered this issue into the corrective action program (CAP) as action requests AR01858862 and AR01861158, and developed visual examination acceptance criteria to restore compliance with this NRC regulation.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, "Issue Screening" dated September 7, 2012, because it adversely affected the Barrier Integrity Cornerstone attribute of maintaining the functional integrity of containment. The inspectors also answered "Yes" to the more than minor screening question, "If left uncorrected, would the performance deficiency have the potential to lead to a more significant safety concern?" Specifically, the lack of acceptance criteria in site procedures for containment visual examinations would become a more significant safety concern in that active liner degradation may not be properly evaluated and/or promptly corrected, resulting in a containment liner breach. In accordance with Table 2, "Cornerstones Affected by Degraded Condition or Programmatic Weakness," of IMC 0609, Attachment 4, "Initial Characterization of Findings," issued June 19, 2012, the inspectors checked the box under the Barrier Integrity Cornerstone because the corrosion induced pitting degraded the containment barrier. The inspectors determined this finding was of very low safety significance based on answering "No" to the Exhibit 3, "Barrier Integrity Screening Questions," in IMC 0609, Attachment A, "The Significance Determination Process (SDP) for Findings At Power," issued on June 19, 2012. Specifically, the inspectors answered "No" to the screening question associated with an actual open pathway (e.g., breach) in the containment and "No" to the question associated with reduction in function of hydrogen igniters in containment. The inspectors determined that the primary cause of the failure to define containment visual examination acceptance criteria was related to the cross-cutting component of human performance, decision-making, because licensee staff did not apply a systematic process, when faced with unexpected plant conditions, to ensure safety was maintained. Specifically, a systematic process for developing acceptance criteria was not applied for the containment visual examinations (H.1(a)).

Inspection Report# : [2013003](#) (*pdf*)

Significance: G Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Response for Loss of Spent Fuel Pool Cooling Did Not Consider the Most Limited Time to Boil

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors for the licensee's failure to account for the most limiting spent fuel pool (SFP) time to boil in calculations and procedures. Specifically, the service water design-basis analysis and abnormal operating procedure (AOP) for loss of SFP cooling used a time to boil value based on non-limiting conditions. The issue was entered into the licensee's CAP as AR01852528 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Barrier Integrity Cornerstone, in that, if left uncorrected, it would have lead to a more significant safety concern. The inspectors evaluated the finding using IMC 0609, Appendix A, Exhibit 3, for the Barrier Integrity Cornerstone, and determined the significance of this finding could be evaluated using qualitative criteria in accordance with IMC 0609, Appendix M. With consultation of an RIII SRA, the inspectors determined the finding screened as of very low safety significance because it involved a design-basis event (e.g., loss of cooling accident (LOCA)) on one unit occurring during a short window of time when the SFP is subjected to the maximum allowed heat load shortly after the other unit is defueled. The inspectors did not identify a cross-cutting aspect associated with this finding because the finding was not confirmed to reflect current performance due to the age of the performance deficiency.

Inspection Report# : [2013002](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Significance: G Sep 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Update FSAR for Radioactive Waste Storage Changes (2RS8)

The inspectors identified a finding of very low safety significance and an associated Severity Level IV (SL-IV) NCV of 10 CFR 50.71(e), "Maintenance of Records, Making of Reports," for the licensee's failure to comply with the requirements to periodically update the Final Safety Analysis Report (FSAR) to include an accurate description of the site's solid waste management system and radiation monitoring system as a result of modifications made to the site. This issue was entered into the licensee's CAP as AR01898640 and AR01898643.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, because if left uncorrected, this could lead to a more significant safety concern because future changes to the facility, procedures, and programs would not be able to consider the licensing basis information that was removed or never inserted. The finding was determined to be of very low safety significance (Green) in accordance with IMC 0609, Appendix D, "Public Radiation Safety Cornerstone Significance Determination Process," because it involved radioactive material control but did not result in public exposure greater than 5 mrem [millirem]. Additionally, using IMC 0612, Appendix B, "Issue Screening," the inspectors determined that the violation of 10 CFR 50.71(e) could be dispositioned using

traditional enforcement because it had the potential to impact the NRC's ability to perform its regulatory function. The violation was determined to be a SL-IV violation using the NRC's Enforcement Policy, Section 6.1, because the inaccurate information was not used to make an unacceptable change to the facility procedures. The inspectors concluded that this finding did not have an associated cross-cutting aspect.

Inspection Report# : [2013004](#) (*pdf*)

Significance:  Mar 31, 2013

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Survey for Neutron Dose from Source Storage

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR 20.1501 was self-revealed when the licensee failed to evaluate dose to personnel from neutron radiation. Specifically, on September 5, 2012, it was self revealed to the licensee that unevaluated neutron dose was present in an office area located outside the Radiologically Controlled Area (RCA) due to a source storage room housing a neutron source. This issue was entered into the licensee's CAP as AR01809560. Corrective actions included moving the neutron source into the RCA, performing a condition evaluation, and performing dose estimates to various plant personnel.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because the finding was associated with the Occupational and Public Radiation Safety Cornerstones and adversely affected the cornerstones objective. The inspectors evaluated the finding using IMC 0609, Appendix D, for the Public Radiation Safety Cornerstone, and determined the finding to be of very low safety significance. The finding had a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to ensure supervisory and management oversight of work activities such that nuclear safety is supported (H.4(c)). Specifically, the licensee did not provide supervisory oversight to ensure that the survey program was sufficient to ensure compliance with 10 CFR Part 20 requirements.

Inspection Report# : [2013002](#) (*pdf*)

Significance:  Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Implement And Maintain Procedures Regarding Breathing Air Quality

The inspectors identified a finding of very low safety significance (Green) and associated non-cited violation of 10 CFR 20.1703 for the failure to implement and maintain written procedures regarding breathing air quality which resulted in the failure to perform breathing air quality tests since December 2011. This issue was entered into the licensee's corrective action program (CAP) as AR01821842. An air quality test was subsequently performed resulting in grade "D" or better air and a review of past air compressor maintenance was performed to provide adequate assurance that breathing air met the grade "D" requirements since the last test in December 2011. The licensee has also made necessary procedural changes to ensure air quality tests are performed on a quarterly basis.

The performance deficiency was determined to be of more than minor safety significance in accordance with IMC 0612, Appendix B, "Issue Screening," because if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, continued failure to test for breathing air quality could have resulted in unbreathable air being introduced into the licensee's SCBAs and control room emergency breathing air system. The inspectors also reviewed the guidance in IMC 0612, Appendix E, "Examples of Minor Issues," and did not find any similar examples. In accordance with IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," the inspectors determined that the finding had very low safety significance (Green) because the finding did not involve: (1) ALARA planning and controls, (2) a radiological overexposure, (3) a substantial potential for an overexposure, or (4) a compromised ability to assess dose. The primary cause of this finding was related to the cross-cutting aspect of human performance with the component of decision making in that the licensee

communicates decisions and the basis for decisions to personnel who have a need to know the information in order to perform the work safely, in a timely manner. (H.1(c))

Inspection Report# : [2012005](#) (*pdf*)

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: N/A Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Update the External Flooding Mitigation Features in the FSAR

An SL-IV NCV of 10 CFR Part 50.71(e), "Maintenance of Records, Making of Reports," was identified by the inspectors for the licensee's failure to comply with the requirements to periodically update the FSAR to include an accurate description of the flooding design and credited mitigation features for the site as a result of a modification made to the plant. The issue was entered into the licensee's CAP as AR01819241 for evaluation and development of corrective actions.

The inspectors used IMC 0612, Appendix B, and determined the performance deficiency could be dispositioned using traditional enforcement. Specifically, the inspectors determined that the issue was considered for traditional enforcement because it had the potential for impacting the NRC's ability to perform its regulatory function. The inspectors concluded that the finding is more than minor because, if left uncorrected, this could lead to a more significant safety concern because future changes to the facility, procedures, and programs would not consider the licensing basis information that was removed or never inserted. The finding was determined to be an SL IV violation using Section 6.1 of the NRC's Enforcement Policy because the inaccurate information was not used to make an unacceptable change to the facility or procedures. Since this performance deficiency was dispositioned using traditional enforcement, there is no cross-cutting aspect assigned.

Inspection Report# : [2013002](#) (*pdf*)

Last modified : December 03, 2013

Point Beach 2

4Q/2013 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2013

Identified By: NRC

Item Type: FIN Finding

Failure to Control Materials Classified as High Winds/Tornado Hazards

The inspectors identified a finding of very low safety significance for the licensee's failure to maintain control over the proper storage and placement of materials that were classified as high winds/tornado hazards, in accordance with procedure NP 1.9.6, "Plant Cleanliness and Storage." Specifically, the inspectors identified that the licensee failed to perform weekly high wind missile hazards inspections since April 17, 2013. As a result, unsecured wooden pallets, wooden planks, metal rods and a metallic desk were discovered by the inspectors near Units 1 and 2 transformer areas. The issue was entered into the licensee's corrective action program (CAP) for resolution as action request AR01882921. The licensee took immediate corrective action to remove and/or properly store the material after the tornado warning on June 17, 2013.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, because if left uncorrected, the unsecured items would have the potential to lead to a more significant safety concern during high wind and tornado events. The inspectors determined the finding to be of very low safety significance because the inspectors answered "No" to each question listed in IMC 0609, Appendix A, Exhibit 1, "Initiating Event Screening Questions." The inspectors determined that the finding has a cross cutting aspect in the area of human performance, work practices, because the licensee did not provide supervisory or management oversight of work activities such that nuclear safety was supported. Specifically, the licensee failed to provide appropriate oversight of work activities such that, when the program owner of the weekly high wind inspection changed, the requirement to perform weekly high winds tornado hazard walkdowns was not understood (H.4(c)).

Inspection Report# : [2013003](#) (*pdf*)

Significance:  Jun 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Operability Evaluation Process Following Water Leakage into the Control Room

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 50, Appendix B, Criterion V for the licensee's failure to follow procedure EN AA 203 1001, "Operability Determinations/Functionality Assessments." Specifically, following water leakage into the control room, the licensee's immediate operability determination failed to evaluate the effect the leakage had on the control room envelope operability. Additionally, the licensee did not address the functionality of the degraded flood barrier and its impact on operability. This issue was entered into the corrective action program (CAP) as AR01877185. Corrective actions for this issue included performing a test of the control room envelope to demonstrate that appropriate positive pressure could be maintained with the known degraded barrier, and repair of the degraded flood barrier following performance of a functionality assessment.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Protection Against External Factors attribute of the Initiating Event Cornerstone, and

adversely affected the Cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during power operations. The inspectors determined the finding to be of very low safety significance in accordance with IMC 0609, Appendix A, Exhibit 1, because they answered “No” to the questions under Transient Initiators and External Event Initiators. The inspectors concluded that this finding has a cross-cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to thoroughly evaluate this problem such that the resolution addressed the cause and evaluated the condition for operability (P.1(c)).

Inspection Report# : [2013003](#) (*pdf*)

Significance:  Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Properly Implement a Compensatory Fire Watch As Required by the Fire Protection Program

A finding of very low safety significance and an associated non-cited violation (NCV) of Technical Specification (TS) 5.4.1.h, “Fire Protection Implementation,” for Units 1 and 2, was identified by the inspectors for the licensee’s failure to implement compensatory fire watches for multiple fire zones in the plant auxiliary building, in accordance with the fire protection program requirements. Specifically, the licensee failed to implement the guidelines for compensatory fire watches as described in Operations Manual (OM) 3.27, “Control of Fire Protection and Appendix R Safe Shutdown Equipment” for the affected fire zones. The issue was entered into the licensee’s corrective action program (CAP) as AR01855430.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Initiating Events Cornerstone attribute of Protection Against External Factors (Fire) and adversely affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during plant operations. The inspectors evaluated the finding using IMC 0609, Appendix F, because the finding degraded the ability to adequately implement fire prevention and administrative controls affecting the ability to reach and maintain safe shutdown capabilities. A Region III (RIII) Senior Reactor Analyst (SRA) performed a modified Phase 2 evaluation and determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to define and effectively communicate expectations regarding procedural compliance and personnel did not follow procedures (H.4(b)). Specifically, the expectation for procedural compliance, for when the fire zones become high radiation areas requires that fire rounds are to be performed by Operations instead of security.

Inspection Report# : [2013002](#) (*pdf*)

Mitigating Systems

Significance:  Dec 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Maintenance and Test Equipment Procedure

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” for the licensee’s failure to follow procedure NP 8.7.1, “Measurement and Test Equipment [M&TE].” Specifically, the inspectors identified multiple examples where the licensee did not document the withdrawal and use of M&TE in either the M&TE usage log or its electronic equivalent. This issue was entered into the licensee’s corrective action program (CAP) as action request (AR) 01925171.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, "Issue Screening," dated September 7, 2012, because, if left uncorrected, the performance deficiency had the potential to lead to a more significant safety concern. Specifically, without accurate M&TE usage logs the licensee may not evaluate all past surveillances affected by failed M&TE, potentially resulting in a failed TS surveillance going undetected. The inspectors determined that the finding was associated with the Mitigating Systems Cornerstone, because not evaluating the prior use of inaccurate M&TE could permit equipment required to mitigate the consequences of the accident to not perform its design and licensing basis functions when called upon. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. The inspectors concluded that this finding has a cross-cutting aspect in the area of human performance, decision making, because the licensee failed to effectively communicate the station expectations related to changes in responsibilities for implementing NP 8.7.1.

Inspection Report# : [2013005](#) (*pdf*)

Significance:  Jun 30, 2013

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Implement Risk Management Actions During Bus D-40 Outage

A self-revealed finding of very low safety significance and an associated non-cited violation of 10 CFR 50.65(a)(4) occurred on April 29, 2013, as a result of the licensee's failure to properly manage and assess risk during a scheduled maintenance outage for emergency diesel generator G-04. Specifically, not all ongoing maintenance activities had been taken into account in the risk assessment for the in-progress maintenance activities and an unplanned entry into yellow risk occurred when they isolated bus D-40. The licensee entered this issue into the corrective action program (CAP) as action request AR01870208. Corrective actions for this issue included restoring bus D-40 to service and initiating an evaluation of the issue through the condition reporting process.

The inspectors determined the finding to be more than minor because it was similar to Example 7.e of IMC 0612, Appendix E, "Example of Minor Issues," dated August 11, 2009, and because it was associated with the Design Control attribute of the Mitigating Systems Cornerstone. The finding also affected the Cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, and Appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process." The inspectors determined that the finding was a mitigating systems contributor; evaluated the risk deficit for each instance; and found that the issue screened as having very low safety significance. The inspectors determined that the finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to appropriately plan and coordinate work activities. Specifically, when the licensee attempted to remove bus D-40 isolation work from the work schedule, the work package was not updated to reflect the change; and there was a failure to communicate and/or coordinate the changes in the work scope to the appropriate groups (H.3(b)).

Inspection Report# : [2013003](#) (*pdf*)

Significance:  Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Establish Adequate Procedures to Respond to Probable Maximum Precipitation Event

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to establish an abnormal operating procedure (AOP) to respond to a flooding event and for failure to establish procedures for control and maintenance of external flooding design features for the probable maximum precipitation event as described in the FSAR. The issue was entered into the licensee's CAP as AR01856322 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Procedure Quality, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). The inspectors evaluated the finding using IMC 0609, Appendix A, Exhibit 2, for the Mitigating Systems Cornerstone, and determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, resources, because the licensee failed to maintain long term plant safety by maintenance of the external flooding design features (H.2(a)). Specifically, in the recent past, the licensee inappropriately cancelled the preventive maintenance associated with the ditches and storm drains following the completion of the drainage system study in June 2010.

Inspection Report# : [2013002](#) (pdf)

Significance:  Mar 31, 2013

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Safety Related Bus 2B-04 Supply Breaker Installed With Incorrect Setpoint

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed when the supply breaker to safety-related bus 2B04 tripped prematurely. Specifically, on June 6, 2011, when energizing pressurizer heaters, the feeder breaker to safety related 480 volt bus, 2B04, opened due to an over current condition; and it was later determined that the setpoint for the breaker was incorrectly set at 2000 amps versus 3000 amps as required. The issue was entered into the licensee's CAP as AR01657810. The trip setpoint on the breaker was immediately corrected, and this action restored compliance with the design requirements. Additional corrective actions were initiated to revise the maintenance procedure to list the task as a high risk activity and to add a verification step relative to the set point adjustments.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Mitigating Systems Cornerstone attribute of Human Performance, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix A, Exhibit 2, and determined a detailed risk analysis was needed. A Region III SRA performed the detailed risk evaluation and determined the finding to be of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, work practices, human error prevention techniques, because the licensee failed to implement peer checking techniques commensurate with the safety significance of the task (H.4(a)). Specifically, a peer check was not used to validate that the safety related trip setpoint of the bus 2B04 supply breaker was accurately set; had it been used, the peer check could have been prevented the occurrence.

Inspection Report# : [2013002](#) (pdf)

Significance:  Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Engineered Safety Feature Steam Line Pressure Dynamics Modules Discovered Outside of Technical Specification Values

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," was identified by the inspectors for the licensee's failure to incorporate a design-basis drift calculation and appropriate tolerances for calibrating the Engineered Safety Features Actuation System steam line pressure dynamic compensation modules into a calibration procedure used to assure TS requirements. The issue was entered into the licensee's CAP as AR01629378.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Mitigating Systems Cornerstone attribute of Design Control, and adversely impacted the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, Appendix A, Exhibit 2, for the Mitigating Systems Cornerstone, and determined the finding to be of very low safety significance. The finding has a cross-cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to take corrective action in a timely manner for the issue identified in previous licensee event report LER 266/2010 001 00 and the associated apparent cause evaluation. (P.1(d))

Inspection Report# : [2013002](#) (*pdf*)

Significance: **W** Mar 31, 2013

Identified By: NRC

Item Type: VIO Violation

Failure to Establish an Adequate Procedure to Implement Wave Run-Up Design Features

A WHITE finding and a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors in that from January 19, 1996 until March 13, 2013, the licensee failed to have a procedure appropriate to the circumstances to address external flooding as described in the Final Safety Analysis Report (FSAR.) Specifically, Procedure PC 80 Part 7, as implemented, would not protect safety-related equipment in the turbine building or pumphouse because the procedure (1) did not appropriately prescribe the installation of barriers such that gaps in or between the barriers were eliminated to prevent water intrusion, (2) did not protect equipment by requiring barriers to be placed in front of the doors, from 1996 to 2008, as described in the FSAR, and (3) did not require the barriers to protect the plant to an elevation of at least 9 feet (589 foot elevation) as described in the FSAR.

The performance deficiency was screened against the Reactor Oversight Process per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Procedure Quality, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee's failure to procedurally control and maintain external flooding design features and to provide procedural controls for external events could negatively impact mitigating systems' ability to respond to an external flooding event. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A, and determined a detailed risk evaluation was needed. This finding does not present an immediate safety concern, in that, the licensee has taken corrective action and revised procedures implementing wave run-up protection features. Specifically, the licensee's procedure has been revised to direct the installation of jersey barriers in conjunction with the use of sandbags, existing jersey barriers have been modified, and sandbags and additional jersey barriers have been purchased and pre-staged. These issues are being characterized as an apparent violation in accordance with the NRC's Enforcement Policy, with its final significance to be dispositioned in separate future correspondence. This finding has a cross cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to thoroughly evaluate problems such that the resolutions address causes and extent of conditions [P.1 (c)].

Inspection Report# : [2013002](#) (*pdf*)

Inspection Report# : [2013011](#) (*pdf*)

Inspection Report# : [2013012](#) (pdf)

Barrier Integrity

Significance: G Sep 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Operability/Functionality Evaluation Process Following Radiation Monitor Failure

The inspectors identified a finding of very low safety significance and an associated NCV of 10 CFR Part 50, Appendix B, Criterion V, for the licensee's failure to follow procedure EN AA 203 1001, "Operability Determinations/Functionality Assessments." Specifically, when the Unit 1 main steam line A release monitor, 1RE 232, went into high alarm due to high ambient temperatures, the licensee's immediate functionality determination failed to evaluate the potential impact of the degraded state of the radiation monitor in the emergency plan. Additionally, a functionality assessment was not requested as specified by the procedure. This issue was entered into the licensee's corrective action program (CAP) as action request (AR) 01902921.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, because if left uncorrected, the failure to perform operability and functionality evaluations, and to recognize conditions that could render equipment inoperable, had the potential to lead to a more significant concern. The inspectors determined that the finding was associated with the Barrier Integrity Cornerstone, because the main steam line radiation monitor provides reasonable assurance that physical design barriers protect the public from radionuclide releases. The inspectors determined the finding to be of very low safety significance in accordance with IMC 0609, Appendix A, Exhibit 1, because they answered "No" to the questions under the Barrier Integrity screening questions. The inspectors concluded that this finding has a cross-cutting aspect in the area of human performance, decision making, because the licensee failed to use conservative assumptions in decision making after the receipt of the unexpected high alarm on 1RE 232 and did not request a functionality assessment to ensure that the condition and proposed actions were fully understood. Specifically, operations personnel did not request a documented evaluation to support understanding why the alarming monitor did not affect the functionality of the instrument as it related to the instrument's emergency plan functions. (H.1 (b))

Inspection Report# : [2013004](#) (pdf)

Significance: G Jun 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Lack of Acceptance Criteria for Containment Visual Examinations

The inspectors identified a non-cited violation of 10 CFR 50.55a(g)(4), for failure to define acceptance criteria for containment visual examinations. Consequently, active containment liner degradation (pitting) was identified and the liner returned to service without defined criteria for accepting this condition. The licensee entered this issue into the corrective action program (CAP) as action requests AR01858862 and AR01861158, and developed visual examination acceptance criteria to restore compliance with this NRC regulation.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, "Issue Screening" dated September 7, 2012, because it adversely affected the Barrier Integrity Cornerstone attribute of maintaining the functional integrity of containment. The inspectors also answered "Yes" to the more than minor screening question, "If left uncorrected, would the performance deficiency have the potential to lead to a more significant safety concern?" Specifically, the lack of acceptance criteria in site procedures for containment visual

examinations would become a more significant safety concern in that active liner degradation may not be properly evaluated and/or promptly corrected, resulting in a containment liner breach. In accordance with Table 2, “Cornerstones Affected by Degraded Condition or Programmatic Weakness,” of IMC 0609, Attachment 4, “Initial Characterization of Findings,” issued June 19, 2012, the inspectors checked the box under the Barrier Integrity Cornerstone because the corrosion induced pitting degraded the containment barrier. The inspectors determined this finding was of very low safety significance based on answering “No” to the Exhibit 3, “Barrier Integrity Screening Questions,” in IMC 0609, Attachment A, “The Significance Determination Process (SDP) for Findings At Power,” issued on June 19, 2012. Specifically, the inspectors answered “No” to the screening question associated with an actual open pathway (e.g., breach) in the containment and “No” to the question associated with reduction in function of hydrogen igniters in containment. The inspectors determined that the primary cause of the failure to define containment visual examination acceptance criteria was related to the cross-cutting component of human performance, decision-making, because licensee staff did not apply a systematic process, when faced with unexpected plant conditions, to ensure safety was maintained. Specifically, a systematic process for developing acceptance criteria was not applied for the containment visual examinations (H.1(a)).

Inspection Report# : [2013003](#) (*pdf*)

Significance:  Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Response for Loss of Spent Fuel Pool Cooling Did Not Consider the Most Limited Time to Boil

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” was identified by the inspectors for the licensee’s failure to account for the most limiting spent fuel pool (SFP) time to boil in calculations and procedures. Specifically, the service water design-basis analysis and abnormal operating procedure (AOP) for loss of SFP cooling used a time to boil value based on non-limiting conditions. The issue was entered into the licensee’s CAP as AR01852528 for evaluation and development of corrective actions.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Barrier Integrity Cornerstone, in that, if left uncorrected, it would have lead to a more significant safety concern. The inspectors evaluated the finding using IMC 0609, Appendix A, Exhibit 3, for the Barrier Integrity Cornerstone, and determined the significance of this finding could be evaluated using qualitative criteria in accordance with IMC 0609, Appendix M. With consultation of an RIII SRA, the inspectors determined the finding screened as of very low safety significance because it involved a design-basis event (e.g., loss of cooling accident (LOCA)) on one unit occurring during a short window of time when the SFP is subjected to the maximum allowed heat load shortly after the other unit is defueled. The inspectors did not identify a cross-cutting aspect associated with this finding because the finding was not confirmed to reflect current performance due to the age of the performance deficiency.

Inspection Report# : [2013002](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Significance:  Sep 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Update FSAR for Radioactive Waste Storage Changes (2RS8)

The inspectors identified a finding of very low safety significance and an associated Severity Level IV (SL-IV) NCV of 10 CFR 50.71(e), "Maintenance of Records, Making of Reports," for the licensee's failure to comply with the requirements to periodically update the Final Safety Analysis Report (FSAR) to include an accurate description of the site's solid waste management system and radiation monitoring system as a result of modifications made to the site. This issue was entered into the licensee's CAP as AR01898640 and AR01898643.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, because if left uncorrected, this could lead to a more significant safety concern because future changes to the facility, procedures, and programs would not be able to consider the licensing basis information that was removed or never inserted. The finding was determined to be of very low safety significance (Green) in accordance with IMC 0609, Appendix D, "Public Radiation Safety Cornerstone Significance Determination Process," because it involved radioactive material control but did not result in public exposure greater than 5 mrem [millirem]. Additionally, using IMC 0612, Appendix B, "Issue Screening," the inspectors determined that the violation of 10 CFR 50.71(e) could be dispositioned using traditional enforcement because it had the potential to impact the NRC's ability to perform its regulatory function. The violation was determined to be a SL-IV violation using the NRC's Enforcement Policy, Section 6.1, because the inaccurate information was not used to make an unacceptable change to the facility procedures. The inspectors concluded that this finding did not have an associated cross-cutting aspect.

Inspection Report# : [2013004](#) (pdf)

G

Significance: Mar 31, 2013

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Survey for Neutron Dose from Source Storage

A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR 20.1501 was self-revealed when the licensee failed to evaluate dose to personnel from neutron radiation. Specifically, on September 5, 2012, it was self revealed to the licensee that unevaluated neutron dose was present in an office area located outside the Radiologically Controlled Area (RCA) due to a source storage room housing a neutron source. This issue was entered into the licensee's CAP as AR01809560. Corrective actions included moving the neutron source into the RCA, performing a condition evaluation, and performing dose estimates to various plant personnel.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because the finding was associated with the Occupational and Public Radiation Safety Cornerstones and adversely affected the cornerstones objective. The inspectors evaluated the finding using IMC 0609, Appendix D, for the Public Radiation Safety Cornerstone, and determined the finding to be of very low safety significance. The finding had a cross-cutting aspect in the area of human performance, work practices, because the licensee failed to ensure supervisory and management oversight of work activities such that nuclear safety is supported (H.4(c)). Specifically, the licensee did not provide supervisory oversight to ensure that the survey program was sufficient to ensure compliance with 10 CFR Part 20 requirements.

Inspection Report# : [2013002](#) (pdf)

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: N/A Mar 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Update the External Flooding Mitigation Features in the FSAR

An SL-IV NCV of 10 CFR Part 50.71(e), "Maintenance of Records, Making of Reports," was identified by the inspectors for the licensee's failure to comply with the requirements to periodically update the FSAR to include an accurate description of the flooding design and credited mitigation features for the site as a result of a modification made to the plant. The issue was entered into the licensee's CAP as AR01819241 for evaluation and development of corrective actions.

The inspectors used IMC 0612, Appendix B, and determined the performance deficiency could be dispositioned using traditional enforcement. Specifically, the inspectors determined that the issue was considered for traditional enforcement because it had the potential for impacting the NRC's ability to perform its regulatory function. The inspectors concluded that the finding is more than minor because, if left uncorrected, this could lead to a more significant safety concern because future changes to the facility, procedures, and programs would not consider the licensing basis information that was removed or never inserted. The finding was determined to be an SL IV violation using Section 6.1 of the NRC's Enforcement Policy because the inaccurate information was not used to make an unacceptable change to the facility or procedures. Since this performance deficiency was dispositioned using traditional enforcement, there is no cross-cutting aspect assigned.

Inspection Report# : [2013002](#) (*pdf*)

Last modified : February 24, 2014

Point Beach 2

1Q/2014 Plant Inspection Findings

Initiating Events

Significance: G Mar 31, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

A Failure to Provide Sufficient Field Overlap to Ensure 100 Percent Coverage

The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion IX, "Control of Special Processes," for a failure to provide sufficient magnetic field overlap to ensure 100 percent coverage while performing a magnetic particle examination (MT) on a steam generator feedwater nozzle weld. The examiner reexamined the area to meet the Code coverage and entered the issue into its Corrective Action Program (CAP) as action request (AR) 01951316.

The inspectors determined that this issue was more than minor in accordance with IMC 0612, Appendix B, "Issue Screening," dated September 7, 2012, because the inspectors answered "yes" to the More-than-Minor question, "If left uncorrected, would the performance deficiency have the potential to lead to a more significant safety concern". Specifically, the required MT examination coverage/overlap was not verified/measured but rather assumed to be adequate by the examiner, and absent NRC intervention, would have returned the component to service for an indefinite period of service, which would have placed the nozzle/piping at increased risk for undetected cracking, leakage or component failure. In accordance with Table 2, "Cornerstones Affected by Degraded Condition or Programmatic Weakness," of IMC 609, Attachment 4, "Initial Characterization of Findings," issued June 19, 2012, the inspectors checked the box under the Initiating Events Cornerstone because leakage at this feedwater piping could be a transient initiator contributor.

The inspectors determined this finding was of very low safety significance (Green) based on answering "no" to the questions in Part A of Exhibit 1, "Initiating Events Screening Questions," in IMC 0609, Attachment A, "The Significance Determination Process for Findings At-Power," issued on June 19, 2012. Specifically, the inspectors answered "no" to the screening question, "Did the finding cause a reactor trip AND the loss of mitigation equipment relied upon to transition the plant from the onset of the trip to a stable shutdown condition (e.g., loss of condenser, loss of feedwater)". The inspectors answered no to this question because the examiner re-examined the area of incomplete coverage and did not identify rejectable flaws. The inspectors determined that the primary cause of the failure to ensure sufficient field overlap while performing a MT examination was related to the cross-cutting component of Human Performance, "Field Presence," because the licensee failed to provide oversight of work activities; including contractors and supplemental personnel. Specifically, proper oversight at the pre-job brief would have ensured the issue of overlap was discussed and understood.

The inspectors determined that proper oversight at the pre-job brief could have ensured the issue of overlap was discussed and understood. Additionally, good direct oversight of the test could have provided the ability to reinforce the correct method of performing the test as well as enabling the site to discover the error instead of the inspector identifying the problem [H.2].

Inspection Report# : [2014002](#) (*pdf*)

Significance: G Jun 30, 2013

Identified By: NRC

Item Type: FIN Finding

Failure to Control Materials Classified as High Winds/Tornado Hazards

The inspectors identified a finding of very low safety significance for the licensee's failure to maintain control over the proper storage and placement of materials that were classified as high winds/tornado hazards, in accordance with procedure NP 1.9.6, "Plant Cleanliness and Storage." Specifically, the inspectors identified that the licensee failed to perform weekly high wind missile hazards inspections since April 17, 2013. As a result, unsecured wooden pallets, wooden planks, metal rods and a metallic desk were discovered by the inspectors near Units 1 and 2 transformer areas. The issue was entered into the licensee's corrective action program (CAP) for resolution as action request AR01882921. The licensee took immediate corrective action to remove and/or properly store the material after the tornado warning on June 17, 2013.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, because if left uncorrected, the unsecured items would have the potential to lead to a more significant safety concern during high wind and tornado events. The inspectors determined the finding to be of very low safety significance because the inspectors answered "No" to each question listed in IMC 0609, Appendix A, Exhibit 1, "Initiating Event Screening Questions." The inspectors determined that the finding has a cross cutting aspect in the area of human performance, work practices, because the licensee did not provide supervisory or management oversight of work activities such that nuclear safety was supported. Specifically, the licensee failed to provide appropriate oversight of work activities such that, when the program owner of the weekly high wind inspection changed, the requirement to perform weekly high winds tornado hazard walkdowns was not understood (H.4(c)).

Inspection Report# : [2013003](#) (pdf)

Significance: G Jun 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Operability Evaluation Process Following Water Leakage into the Control Room

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 50, Appendix B, Criterion V for the licensee's failure to follow procedure EN AA 203 1001, "Operability Determinations/Functionality Assessments." Specifically, following water leakage into the control room, the licensee's immediate operability determination failed to evaluate the effect the leakage had on the control room envelope operability. Additionally, the licensee did not address the functionality of the degraded flood barrier and its impact on operability. This issue was entered into the corrective action program (CAP) as AR01877185. Corrective actions for this issue included performing a test of the control room envelope to demonstrate that appropriate positive pressure could be maintained with the known degraded barrier, and repair of the degraded flood barrier following performance of a functionality assessment.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, because it was associated with the Protection Against External Factors attribute of the Initiating Event Cornerstone, and adversely affected the Cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during power operations. The inspectors determined the finding to be of very low safety significance in accordance with IMC 0609, Appendix A, Exhibit 1, because they answered "No" to the questions under Transient Initiators and External Event Initiators. The inspectors concluded that this finding has a cross-cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to thoroughly evaluate this problem such that the resolution addressed the cause and evaluated the condition for operability (P.1(c)).

Inspection Report# : [2013003](#) (pdf)

Mitigating Systems

Significance: G Mar 31, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Measure Interpass Temperature

The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion IX, “Control of Special Processes,” for a failure to measure the interpass temperature while performing welding on the auxiliary feedwater (AFW) piping system in accordance with welding procedure specifications (WPS) FP-PE-B31-P1P1-GTSM-001. Consequently, welding was performed without the Code and procedure required interpass temperature being monitored on a number of welds, a parameter which can affect the mechanical properties of the material being welded. To restore compliance, the welder proceeded to measure the interpass temperature and ensured that the temperature requirement would not have been exceeded. The licensee entered this issue into their CAP as AR 01950601.

The inspectors determined that this issue was more than minor in accordance with IMC 0612, Appendix B, “Issue Screening,” dated September 7, 2012, because the inspectors answered “yes” to the More-than-Minor question, “If left uncorrected, would the performance deficiency have the potential to lead to a more significant safety concern”. Specifically, absent NRC intervention, the welder would have completed all of the welds without having measured the interpass temperature, a welding parameter which can affect the mechanical properties (e.g., impact properties) of some materials being welded, and could lead to a potential failure of the weld in service. In accordance with Table 2, “Cornerstones Affected by Degraded Condition or Programmatic Weakness,” of IMC 609, Attachment 4, “Initial Characterization of Findings,” issued June 19, 2012, the inspectors checked the box under the Mitigating Systems Cornerstone because leakage at this AFW piping could degrade short term heat removal. The inspectors determined this finding was of very low safety significance (Green) based on answering “no” to the questions in Part A of Exhibit 1, “Mitigating Systems Screening Questions,” in IMC 0609, Attachment A, “The Significance Determination Process for Findings At-Power,” issued on June 19, 2012. Specifically, the inspectors answered, “yes” to the screening question “If the finding is a deficiency affecting the design or qualification of a mitigating structures systems component (SSC), does the SSC maintain its operability or functionality”. The welder subsequently performed interpass temperature measurements and demonstrated that the temperature would remain below the required temperature of the welds in question, and the issue did not result in the actual loss of the operability or functionality of a safety system.

The inspectors determined that the primary cause of the failure to measure the interpass temperature in accordance with WPS FP-PE-B31-P1P1-GTSM-001 was related to the cross-cutting component of Problem Identification and Resolution, P.4 “Trending”. The organization failed to periodically analyze information from the corrective action program and other assessments in the aggregate to identify programmatic and common cause issues. Point Beach had experienced a number of issues related to welding in the weeks before the interpass temperature issue, leading to some 19 welding-related action request (ARs) being written. The total of these issues presented the site with the opportunity to evaluate if there were problems with the conduct of the welding program. Resulting increased focus could have led to licensee identification of, or prevention of, the lack of taking temperatures.

Inspection Report# : [2014002](#) (*pdf*)

Significance: G Mar 31, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Flood Reviews of Material That Could Affect Flood Relief Paths

The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” for the failure to follow procedures. Specifically, the licensee failed to perform a flood review, as required by NP 8.4.17, “PBNP Flooding Barrier / Relief Path Program,” Revision 15, when work activities in the G-02 EDG room left a lightweight wet floor safety sign that could have been transported during a license basis internal flood event and affected the flow capacity of the flood relief slots. The licensee’s short-term corrective actions included removing the material from the G-02 EDG room and communicating to station personnel the importance of

not leaving susceptible material unattended. The licensee entered this issue into their CAP as AR 01960472. The inspectors determined that the finding was more than minor, because, if left uncorrected, it could have the potential to become a more significant safety concern. Specifically, if the licensee was not performing flood reviews for material left unattended during or after work activities, susceptible unattended material could be transported to credited flood relief dampers and impeded the design flow rate required for the dampers to protect safety related equipment. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 4, "External Events Screening Questions," dated June 19, 2012. The inspectors answered "yes" to question 1 of External Events screening questions since the finding could potentially degrade one train of the emergency power system (a risk-significant system). Thus the inspectors consulted the regional Senior Risk Analyst (SRA). The SRA performed a detailed risk evaluation using the Point Beach Standardized Plant Analysis Risk Model Version 8.22. For there to be a risk increase due to this deficiency there would have to be a LOOP coincident with a flood event that renders the G-O2 EDG unavailable. The SRA performed a bounding analysis assuming that the flood event occurred coincident with a LOOP. The exposure time for the deficient condition was not more than 15-days. Assuming a 15-day exposure time, the delta CDF was 9.3E-08/yr. The dominant sequence involved a transient initiating event with a consequential LOOP and station blackout. Based on the result of the detailed risk evaluation, the issue was of very low risk significance. This finding has a cross-cutting aspect of Training (H.9) in the area of human performance, for failing to provide training and ensure knowledge transfer to maintain a knowledgeable workforce. Specifically, the licensee did not ensure that personnel were knowledgeable of need to control material that could transport during an internal flooding event, restrict flood relief paths, and affect flood mitigation features.

Inspection Report# : [2014002](#) (*pdf*)

Significance:  Mar 06, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Take Corrective Actions to Address External Flooding Procedure Deficiencies

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," in that from March 13, 2013 until February 14, 2014, the licensee failed to assure that for a significant condition adverse to quality (SQAC), the cause of the condition was determined and corrective actions were taken to preclude repetition. Specifically, the licensee's corrective actions failed to preclude repetition of an SQAC where Procedure PC 80 Part 7, "Lake Water Level Determination," as implemented, would not protect safety-related equipment in the turbine building or Circulating Water Pump House (CWPH). After the licensee had taken corrective actions to improve the wave barrier procedure in response to an NRC-identified NOV, PC 80 Part 7 and other flood protection implementing procedures specified inadequate timelines to ensure wave run-up flood barriers would be installed prior to the lake level at which wave run-up could impact the site. Corrective actions for this issue included changing the affected procedures to install the wave barriers at a lower lake level, changing the lake level determination surveillance from monthly to weekly, and reducing the allowed installation time for the barriers from 3 weeks to 1 week.

The performance deficiency was screened against the Reactor Oversight Process per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Procedure Quality, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee's failure to correct procedural deficiencies associated with flood barrier construction timelines, could challenge the timely installation of the barriers, which could impact the ability of mitigating systems to respond during an external flooding event. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A. Based on a

review of Appendix A, Exhibit 2, Item 4.B, the inspectors determined that this issue screened as having very low safety significance (Green).

This finding has a cross-cutting aspect in the area of problem identification and resolution, because the licensee failed to thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance. (P.2)

Inspection Report# : [2014007](#) (*pdf*)

Significance:  Mar 06, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain External Flooding Procedure to Address All Possible CLB Floods

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” in that from January 19, 1996 until November 25, 2013, the licensee failed to ensure that activities affecting quality were prescribed by documented procedures of a type appropriate to the circumstances to address external flooding as described in the Final Safety Analysis Report (FSAR). Specifically, PC 80 Part 7, “Lake Water Level Determination” directed advanced installation of concrete barriers to protect against deep wave action from the lake, which introduced significant unrecognized blockages in the natural drainage path credited in the FSAR to protect against the probable maximum precipitation and Turbine Building internal flooding events. Corrective actions for this issue included changing the procedure and FSAR to include actions to provide an additional flood relief path through the CWPH building and reliance on internal flood relief dampers for the affected flooding events.

The performance deficiency was screened against the Reactor Oversight Process per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Procedure Quality, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee’s failure to procedurally control external flooding design features to ensure they would not adversely affect the strategy for other flooding events, could negatively impact mitigating systems’ ability to respond during external and internal flooding events. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A, and determined a detailed risk evaluation was required. Following a detailed risk evaluation, Region III SRAs determined that the finding had very low safety significance (Green). This finding has a cross-cutting aspect in the area of problem identification and resolution, because the licensee failed to take effective corrective actions to address issues in a timely manner commensurate with their safety significance. (P.3)

Inspection Report# : [2014007](#) (*pdf*)

Significance:  Mar 06, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a Required 10 CFR Part 50.59 Evaluation

The inspectors identified a finding of very low safety significance and associated Severity Level IV, non-cited violation of 10 CFR 50.59(d)(1), “Changes, tests and experiments,” when, on November 25, 2013, the licensee failed to perform an evaluation against the criteria in 10 CFR 50.59(c)(2) for a change to procedure PC 80 Part 7 to include actions to maintain functionality of drainage paths during probable maximum precipitation and turbine building flooding events. Specifically,

PC 80 Part 7, “Lake Water Level Determination” was changed to include actions to open the CWPH rollup doors to provide an additional drainage path while wave barriers were in place, without fully evaluating the viability of reliance on additional flood features not credited for external flooding in the Current License Basis (CLB). Corrective actions for this issue included to updating the FSAR to describe the new flood paths, performing a 10 CFR 50.59 screening and 10 CFR 50.59 evaluation for the new drainage path which had put the site outside of the CLB, revising

a related functionality assessment, controlling external flooding areas to ensure they are clear of debris, and creating a procedure to install curtains on the CWPH rollup doors during periods when they were required to be open.

The inspectors determined that the licensee's failure to fully evaluate the viability of newly created flooding drainage paths as required by 10 CFR 50.59(d)(1) was a performance deficiency. The inspectors evaluated the performance deficiency using traditional enforcement in conjunction with the SDP because the performance deficiency had the potential to impact the regulatory process. The performance deficiency was screened per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Design Control, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee did not fully demonstrate that the availability, reliability, and capability of mitigating systems would be maintained during flooding events due to the site's failure to evaluate the viability of alternate flood drainage paths through the CWPH. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A. Based on a review of Appendix A, Exhibit 2, Item 4.B, the inspectors determined that this issue screened as having very low safety significance (Green). Additionally, in accordance with

Section 6.1.d.2 of the NRC Enforcement Policy, this violation is categorized as a Severity Level IV because the resulting conditions were evaluated as having very low safety significance (Green) by the SDP. This finding has a cross-cutting aspect in the area of problem identification and resolution, because the licensee failed to thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance. (P.2)

Inspection Report# : [2014007](#) (pdf)

Significance:  Mar 06, 2014

Identified By: NRC

Item Type: FIN Finding

Failure to Perform a Required 10 CFR Part 50.59 Evaluation

The inspectors identified a finding of very low safety significance and associated Severity Level IV, non-cited violation of 10 CFR 50.59(d)(1), "Changes, tests and experiments," when, on November 25, 2013, the licensee failed to perform an evaluation against the criteria in 10 CFR 50.59(c)(2) for a change to procedure PC 80 Part 7 to include actions to maintain functionality of drainage paths during probable maximum precipitation and turbine building flooding events. Specifically, PC 80 Part 7, "Lake Water Level Determination" was changed to include actions to open the CWPH rollup doors to provide an additional drainage path while wave barriers were in place, without fully evaluating the viability of reliance on additional flood features not credited for external flooding in the Current License Basis (CLB). Corrective actions for this issue included to updating the FSAR to describe the new flood paths, performing a 10 CFR 50.59 screening and 10 CFR 50.59 evaluation for the new drainage path which had put the site outside of the CLB, revising a related functionality assessment, controlling external flooding areas to ensure they are clear of debris, and creating a procedure to install curtains on the CWPH rollup doors during periods when they were required to be open.

The inspectors determined that the licensee's failure to fully evaluate the viability of newly created flooding drainage paths as required by 10 CFR 50.59(d)(1) was a performance deficiency. The inspectors evaluated the performance deficiency using traditional enforcement in conjunction with the SDP because the performance deficiency had the potential to impact the regulatory process. The performance deficiency was screened per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Design Control, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee did not fully demonstrate that the availability, reliability, and capability of mitigating systems would be maintained during flooding

events due to the site's failure to evaluate the viability of alternate flood drainage paths through the CWPH. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A. Based on a review of Appendix A, Exhibit 2, Item 4.B, the inspectors determined that this issue screened as having very low safety significance (Green). Additionally, in accordance with

Section 6.1.d.2 of the NRC Enforcement Policy, this violation is categorized as a Severity Level IV because the resulting conditions were evaluated as having very low safety significance (Green) by the SDP. This finding has a cross-cutting aspect in the area of problem identification and resolution, because the licensee failed to thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance. (P.2)

Inspection Report# : [2014007](#) (pdf)

Significance:  Mar 06, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Establish EFR Attributes to Assess the Effectiveness of Corrective Actions

The inspectors identified a finding of very low safety significance (Green) and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to ensure the effectiveness review attributes for a significant condition adverse to quality would ensure the corrective actions would eliminate or reduce the recurrence rate.

The inspectors determined that the licensee's failure to establish effectiveness review criteria that would have identified whether the corrective action to prevent recurrence (CAPRs) had effectively resolved the conditions was a performance deficiency warranting further review. The inspectors determined that this finding was more than minor in accordance with IMC 0612, Appendix B, because it was affected the Mitigating Systems Cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. If left uncorrected, would the performance deficiency have the potential to lead to a more significant safety concern? The inspectors evaluated the finding using IMC 0609, Appendix A. The inspectors determined the finding was of very low safety significance (Green) because the finding was not a deficiency affecting the design or qualification of a mitigating structure, system or component and did not result in a loss of operability or functionality. In addition, the finding did not represent a loss of system or function, did not represent an actual loss of function of a least a single train for longer than its technical specification allowed outage time, and did not represent an actual loss of function of one or more nontechnical specification trains of equipment designated as high safety-significance. The finding had a cross cutting aspect in the area of problem identification and resolution, specifically resolution, because licensee personnel failed to ensure the corrective actions to prevent recurrence had effective attributes. (P.2)

Inspection Report# : [2014007](#) (pdf)

Significance:  Dec 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Maintenance and Test Equipment Procedure

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to follow procedure NP 8.7.1, "Measurement and Test Equipment [M&TE]." Specifically, the inspectors identified multiple examples where the licensee did not document the withdrawal and use of M&TE in either the M&TE usage log or its electronic equivalent. This issue was entered into the licensee's corrective action program (CAP) as action request (AR) 01925171.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, "Issue Screening," dated September 7, 2012, because, if left uncorrected, the performance deficiency had the potential to lead to a more

significant safety concern. Specifically, without accurate M&TE usage logs the licensee may not evaluate all past surveillances affected by failed M&TE, potentially resulting in a failed TS surveillance going undetected. The inspectors determined that the finding was associated with the Mitigating Systems Cornerstone, because not evaluating the prior use of inaccurate M&TE could permit equipment required to mitigate the consequences of the accident to not perform its design and licensing basis functions when called upon. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. The inspectors concluded that this finding has a cross-cutting aspect in the area of human performance, decision making, because the licensee failed to effectively communicate the station expectations related to changes in responsibilities for implementing NP 8.7.1.

Inspection Report# : [2013005](#) (*pdf*)

Significance: **G** Jun 30, 2013

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Implement Risk Management Actions During Bus D-40 Outage

A self-revealed finding of very low safety significance and an associated non-cited violation of 10 CFR 50.65(a)(4) occurred on April 29, 2013, as a result of the licensee's failure to properly manage and assess risk during a scheduled maintenance outage for emergency diesel generator G-04. Specifically, not all ongoing maintenance activities had been taken into account in the risk assessment for the in-progress maintenance activities and an unplanned entry into yellow risk occurred when they isolated bus D-40. The licensee entered this issue into the corrective action program (CAP) as action request AR01870208. Corrective actions for this issue included restoring bus D-40 to service and initiating an evaluation of the issue through the condition reporting process.

The inspectors determined the finding to be more than minor because it was similar to Example 7.e of IMC 0612, Appendix E, "Example of Minor Issues," dated August 11, 2009, and because it was associated with the Design Control attribute of the Mitigating Systems Cornerstone. The finding also affected the Cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Tables 2 and 3, and Appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process." The inspectors determined that the finding was a mitigating systems contributor; evaluated the risk deficit for each instance; and found that the issue screened as having very low safety significance. The inspectors determined that the finding has a cross-cutting aspect in the area of human performance, work control, because the licensee failed to appropriately plan and coordinate work activities. Specifically, when the licensee attempted to remove bus D-40 isolation work from the work schedule, the work package was not updated to reflect the change; and there was a failure to communicate and/or coordinate the changes in the work scope to the appropriate groups (H.3(b)).

Inspection Report# : [2013003](#) (*pdf*)

Significance: **W** Mar 31, 2013

Identified By: NRC

Item Type: VIO Violation

Failure to Establish an Adequate Procedure to Implement Wave Run-Up Design Features

A WHITE finding and a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors in that from January 19, 1996 until March 13, 2013, the licensee failed to have a procedure appropriate to the circumstances to address external flooding as described in the Final Safety

Analysis Report (FSAR.) Specifically, Procedure PC 80 Part 7, as implemented, would not protect safety-related equipment in the turbine building or pumphouse because the procedure (1) did not appropriately prescribe the installation of barriers such that gaps in or between the barriers were eliminated to prevent water intrusion, (2) did not protect equipment by requiring barriers to be placed in front of the doors, from 1996 to 2008, as described in the FSAR, and (3) did not require the barriers to protect the plant to an elevation of at least 9 feet (589 foot elevation) as described in the FSAR.

The performance deficiency was screened against the Reactor Oversight Process per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Procedure Quality, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee's failure to procedurally control and maintain external flooding design features and to provide procedural controls for external events could negatively impact mitigating systems' ability to respond to an external flooding event. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A, and determined a detailed risk evaluation was needed. This finding does not present an immediate safety concern, in that, the licensee has taken corrective action and revised procedures implementing wave run-up protection features. Specifically, the licensee's procedure has been revised to direct the installation of jersey barriers in conjunction with the use of sandbags, existing jersey barriers have been modified, and sandbags and additional jersey barriers have been purchased and pre-staged. These issues are being characterized as an apparent violation in accordance with the NRC's Enforcement Policy, with its final significance to be dispositioned in separate future correspondence. This finding has a cross cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to thoroughly evaluate problems such that the resolutions address causes and extent of conditions [P.1 (c)].

Inspection Report# : [2013002](#) (*pdf*)

Inspection Report# : [2013011](#) (*pdf*)

Inspection Report# : [2013012](#) (*pdf*)

Inspection Report# : [2014007](#) (*pdf*)

Barrier Integrity

Significance:  Sep 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Operability/Functionality Evaluation Process Following Radiation Monitor Failure

The inspectors identified a finding of very low safety significance and an associated NCV of 10 CFR Part 50, Appendix B, Criterion V, for the licensee's failure to follow procedure EN AA 203 1001, "Operability Determinations/Functionality Assessments." Specifically, when the Unit 1 main steam line A release monitor, 1RE 232, went into high alarm due to high ambient temperatures, the licensee's immediate functionality determination failed to evaluate the potential impact of the degraded state of the radiation monitor in the emergency plan. Additionally, a functionality assessment was not requested as specified by the procedure. This issue was entered into the licensee's corrective action program (CAP) as action request (AR) 01902921.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, because if left uncorrected, the failure to perform operability and functionality evaluations, and to recognize conditions that could render equipment inoperable, had the potential to lead to a more significant concern. The inspectors determined

that the finding was associated with the Barrier Integrity Cornerstone, because the main steam line radiation monitor provides reasonable assurance that physical design barriers protect the public from radionuclide releases. The inspectors determined the finding to be of very low safety significance in accordance with IMC 0609, Appendix A, Exhibit 1, because they answered “No” to the questions under the Barrier Integrity screening questions. The inspectors concluded that this finding has a cross-cutting aspect in the area of human performance, decision making, because the licensee failed to use conservative assumptions in decision making after the receipt of the unexpected high alarm on IRE 232 and did not request a functionality assessment to ensure that the condition and proposed actions were fully understood. Specifically, operations personnel did not request a documented evaluation to support understanding why the alarming monitor did not affect the functionality of the instrument as it related to the instrument’s emergency plan functions. (H.1 (b))

Inspection Report# : [2013004](#) (*pdf*)

Significance: G Jun 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Lack of Acceptance Criteria for Containment Visual Examinations

The inspectors identified a non-cited violation of 10 CFR 50.55a(g)(4), for failure to define acceptance criteria for containment visual examinations. Consequently, active containment liner degradation (pitting) was identified and the liner returned to service without defined criteria for accepting this condition. The licensee entered this issue into the corrective action program (CAP) as action requests AR01858862 and AR01861158, and developed visual examination acceptance criteria to restore compliance with this NRC regulation.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, “Issue Screening” dated September 7, 2012, because it adversely affected the Barrier Integrity Cornerstone attribute of maintaining the functional integrity of containment. The inspectors also answered “Yes” to the more than minor screening question, “If left uncorrected, would the performance deficiency have the potential to lead to a more significant safety concern?” Specifically, the lack of acceptance criteria in site procedures for containment visual examinations would become a more significant safety concern in that active liner degradation may not be properly evaluated and/or promptly corrected, resulting in a containment liner breach. In accordance with Table 2, “Cornerstones Affected by Degraded Condition or Programmatic Weakness,” of IMC 0609, Attachment 4, “Initial Characterization of Findings,” issued June 19, 2012, the inspectors checked the box under the Barrier Integrity Cornerstone because the corrosion induced pitting degraded the containment barrier. The inspectors determined this finding was of very low safety significance based on answering “No” to the Exhibit 3, “Barrier Integrity Screening Questions,” in IMC 0609, Attachment A, “The Significance Determination Process (SDP) for Findings At Power,” issued on June 19, 2012. Specifically, the inspectors answered “No” to the screening question associated with an actual open pathway (e.g., breach) in the containment and “No” to the question associated with reduction in function of hydrogen igniters in containment. The inspectors determined that the primary cause of the failure to define containment visual examination acceptance criteria was related to the cross-cutting component of human performance, decision-making, because licensee staff did not apply a systematic process, when faced with unexpected plant conditions, to ensure safety was maintained. Specifically, a systematic process for developing acceptance criteria was not applied for the containment visual examinations (H.1(a)).

Inspection Report# : [2013003](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Significance:  Sep 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Update FSAR for Radioactive Waste Storage Changes (2RS8)

The inspectors identified a finding of very low safety significance and an associated Severity Level IV (SL-IV) NCV of 10 CFR 50.71(e), "Maintenance of Records, Making of Reports," for the licensee's failure to comply with the requirements to periodically update the Final Safety Analysis Report (FSAR) to include an accurate description of the site's solid waste management system and radiation monitoring system as a result of modifications made to the site. This issue was entered into the licensee's CAP as AR01898640 and AR01898643.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, because if left uncorrected, this could lead to a more significant safety concern because future changes to the facility, procedures, and programs would not be able to consider the licensing basis information that was removed or never inserted. The finding was determined to be of very low safety significance (Green) in accordance with IMC 0609, Appendix D, "Public Radiation Safety Cornerstone Significance Determination Process," because it involved radioactive material control but did not result in public exposure greater than 5 mrem [millirem]. Additionally, using IMC 0612, Appendix B, "Issue Screening," the inspectors determined that the violation of 10 CFR 50.71(e) could be dispositioned using traditional enforcement because it had the potential to impact the NRC's ability to perform its regulatory function. The violation was determined to be a SL-IV violation using the NRC's Enforcement Policy, Section 6.1, because the inaccurate information was not used to make an unacceptable change to the facility procedures. The inspectors concluded that this finding did not have an associated cross-cutting aspect.

Inspection Report# : [2013004](#) (*pdf*)

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : May 30, 2014

Point Beach 2

2Q/2014 Plant Inspection Findings

Initiating Events

Significance: G Mar 31, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

A Failure to Provide Sufficient Field Overlap to Ensure 100 Percent Coverage

The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion IX, “Control of Special Processes,” for a failure to provide sufficient magnetic field overlap to ensure 100 percent coverage while performing a magnetic particle examination (MT) on a steam generator feedwater nozzle weld. The examiner reexamined the area to meet the Code coverage and entered the issue into its Corrective Action Program (CAP) as action request (AR) 01951316.

The inspectors determined that this issue was more than minor in accordance with IMC 0612, Appendix B, “Issue Screening,” dated September 7, 2012, because the inspectors answered “yes” to the More-than-Minor question, “If left uncorrected, would the performance deficiency have the potential to lead to a more significant safety concern”. Specifically, the required MT examination coverage/overlap was not verified/measured but rather assumed to be adequate by the examiner, and absent NRC intervention, would have returned the component to service for an indefinite period of service, which would have placed the nozzle/piping at increased risk for undetected cracking, leakage or component failure. In accordance with Table 2, “Cornerstones Affected by Degraded Condition or Programmatic Weakness,” of IMC 609, Attachment 4, “Initial Characterization of Findings,” issued June 19, 2012, the inspectors checked the box under the Initiating Events Cornerstone because leakage at this feedwater piping could be a transient initiator contributor.

The inspectors determined this finding was of very low safety significance (Green) based on answering “no” to the questions in Part A of Exhibit 1, “Initiating Events Screening Questions,” in IMC 0609, Attachment A, “The Significance Determination Process for Findings At-Power,” issued on June 19, 2012. Specifically, the inspectors answered “no” to the screening question, “Did the finding cause a reactor trip AND the loss of mitigation equipment relied upon to transition the plant from the onset of the trip to a stable shutdown condition (e.g., loss of condenser, loss of feedwater)”. The inspectors answered no to this question because the examiner re-examined the area of incomplete coverage and did not identify rejectable flaws. The inspectors determined that the primary cause of the failure to ensure sufficient field overlap while performing a MT examination was related to the cross-cutting component of Human Performance, “Field Presence,” because the licensee failed to provide oversight of work activities; including contractors and supplemental personnel. Specifically, proper oversight at the pre-job brief would have ensured the issue of overlap was discussed and understood.

The inspectors determined that proper oversight at the pre-job brief could have ensured the issue of overlap was discussed and understood. Additionally, good direct oversight of the test could have provided the ability to reinforce the correct method of performing the test as well as enabling the site to discover the error instead of the inspector identifying the problem [H.2].

Inspection Report# : [2014002](#) (*pdf*)

Significance: G Jun 30, 2013

Identified By: NRC

Item Type: FIN Finding

Failure to Control Materials Classified as High Winds/Tornado Hazards

The inspectors identified a finding of very low safety significance for the licensee's failure to maintain control over the proper storage and placement of materials that were classified as high winds/tornado hazards, in accordance with procedure NP 1.9.6, "Plant Cleanliness and Storage." Specifically, the inspectors identified that the licensee failed to perform weekly high wind missile hazards inspections since April 17, 2013. As a result, unsecured wooden pallets, wooden planks, metal rods and a metallic desk were discovered by the inspectors near Units 1 and 2 transformer areas. The issue was entered into the licensee's corrective action program (CAP) for resolution as action request AR01882921. The licensee took immediate corrective action to remove and/or properly store the material after the tornado warning on June 17, 2013.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, because if left uncorrected, the unsecured items would have the potential to lead to a more significant safety concern during high wind and tornado events. The inspectors determined the finding to be of very low safety significance because the inspectors answered "No" to each question listed in IMC 0609, Appendix A, Exhibit 1, "Initiating Event Screening Questions." The inspectors determined that the finding has a cross cutting aspect in the area of human performance, work practices, because the licensee did not provide supervisory or management oversight of work activities such that nuclear safety was supported. Specifically, the licensee failed to provide appropriate oversight of work activities such that, when the program owner of the weekly high wind inspection changed, the requirement to perform weekly high winds tornado hazard walkdowns was not understood (H.4(c)).

Inspection Report# : [2013003](#) (pdf)

Mitigating Systems

Significance:  Jun 30, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain Control of Loose Material in Containment

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the failure to follow procedures. Specifically, while Unit 2 was in Mode 3, the licensee left buoyant items in containment that were neither anchored or tethered to a substantial structure nor located in an anchored storage box or receptacle, as required by NP 7.2.28, "Containment Debris Control Program," Revision 5, Step 4.2.8(d)3. The licensee entered the issue into their corrective action program (CAP) and implemented short term corrective actions, which included removing the material from containment and communicating to station personnel the importance of not leaving susceptible material unattended in containment while in Modes 1 through 4. The licensee's long-term corrective actions included creating a site specific procedure that places all the containment debris control requirements in one central location.

The inspectors determined that the finding was more than minor, because it was associated with the Equipment Performance attribute of the Mitigating Systems cornerstone. The finding adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At Power," Exhibit 2, Mitigating Systems Screening Questions, dated June 19, 2012. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross cutting aspect of Training (H.9), in the area of Human Performance, for failing to provide training and ensure knowledge transfer to maintain a knowledgeable workforce.

Inspection Report# : [2014003](#) (pdf)

Significance: G Jun 30, 2014

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Age Related Relay Failures Result in Inoperable Inverters

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was self-revealed for the failure to replace safety-related inverter components at the vendor prescribed 10 year frequency. Specifically, after concluding that safety-related inverter relays were required to be replaced at a 10-year frequency, per vendor direction, the licensee failed to promptly replace the remaining relays that were eighteen years old or evaluate if the relays could remain in service until the next scheduled 10 year inverter overhaul. The licensee entered the issue into their CAP and replaced the remaining K2 relays that were past their 10-year replacement frequency in April and June of 2014 and has plans to replace the remaining K1 relays, which provide alarm only function, in 2015.

The inspectors determined finding was more than minor because it was associated with the Equipment Performance attribute of the Mitigating System cornerstone and affected the cornerstone objective of ensuring the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences.

Specifically, the performance deficiency resulted in three additional K2 relay failures in 2013 and 2014, two of which occurred while the inverters were carry instrument bus loads and caused the inoperability of the associated inverters. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings." Because the finding impacted the Mitigating Systems Cornerstone, the inspectors screened the finding through IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," using Exhibit 2, "Mitigating Systems Screening Questions." The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross cutting aspect of Resolution (P.3), in the area of Problem Identification and Resolution because the licensee failed to take effective corrective actions to address issues in a timely manner commensurate with their safety significance.

Inspection Report# : [2014003](#) (*pdf*)

Significance: G Mar 31, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Measure Interpass Temperature

The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion IX, "Control of Special Processes," for a failure to measure the interpass temperature while performing welding on the auxiliary feedwater (AFW) piping system in accordance with welding procedure specifications (WPS) FP-PE-B31-P1P1-GTSM-001. Consequently, welding was performed without the Code and procedure required interpass temperature being monitored on a number of welds, a parameter which can affect the mechanical properties of the material being welded. To restore compliance, the welder proceeded to measure the interpass temperature and ensured that the temperature requirement would not have been exceeded. The licensee entered this issue into their CAP as AR 01950601.

The inspectors determined that this issue was more than minor in accordance with IMC 0612, Appendix B, "Issue Screening," dated September 7, 2012, because the inspectors answered "yes" to the More-than-Minor question, "If left uncorrected, would the performance deficiency have the potential to lead to a more significant safety concern".

Specifically, absent NRC intervention, the welder would have completed all of the welds without having measured the interpass temperature, a welding parameter which can affect the mechanical properties (e.g., impact properties) of some materials being welded, and could lead to a potential failure of the weld in service. In accordance with Table 2, "Cornerstones Affected by Degraded Condition or Programmatic Weakness," of IMC 609, Attachment 4, "Initial Characterization of Findings," issued June 19, 2012, the inspectors checked the box under the Mitigating Systems Cornerstone because leakage at this AFW piping could degrade short term heat removal. The inspectors determined this finding was of very low safety significance (Green) based on answering "no" to the questions in Part A of Exhibit

1, "Mitigating Systems Screening Questions," in IMC 0609, Attachment A, "The Significance Determination Process for Findings At-Power," issued on June 19, 2012. Specifically, the inspectors answered, "yes" to the screening question "If the finding is a deficiency affecting the design or qualification of a mitigating structures systems component (SSC), does the SSC maintain its operability or functionality". The welder subsequently performed interpass temperature measurements and demonstrated that the temperature would remain below the required temperature of the welds in question, and the issue did not result in the actual loss of the operability or functionality of a safety system.

The inspectors determined that the primary cause of the failure to measure the interpass temperature in accordance with WPS FP-PE-B31-P1P1-GTSM-001 was related to the cross-cutting component of Problem Identification and Resolution, P.4 "Trending". The organization failed to periodically analyze information from the corrective action program and other assessments in the aggregate to identify programmatic and common cause issues. Point Beach had experienced a number of issues related to welding in the weeks before the interpass temperature issue, leading to some 19 welding-related action request (ARs) being written. The total of these issues presented the site with the opportunity to evaluate if there were problems with the conduct of the welding program. Resulting increased focus could have led to licensee identification of, or prevention of, the lack of taking temperatures.

Inspection Report# : [2014002](#) (*pdf*)

Significance: G Mar 31, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Flood Reviews of Material That Could Affect Flood Relief Paths

The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to follow procedures. Specifically, the licensee failed to perform a flood review, as required by NP 8.4.17, "PBNP Flooding Barrier / Relief Path Program," Revision 15, when work activities in the G-02 EDG room left a lightweight wet floor safety sign that could have been transported during a license basis internal flood event and affected the flow capacity of the flood relief slots. The licensee's short-term corrective actions included removing the material from the G-02 EDG room and communicating to station personnel the importance of not leaving susceptible material unattended. The licensee entered this issue into their CAP as AR 01960472.

The inspectors determined that the finding was more than minor, because, if left uncorrected, it could have the potential to become a more significant safety concern. Specifically, if the licensee was not performing flood reviews for material left unattended during or after work activities, susceptible unattended material could be transported to credited flood relief dampers and impeded the design flow rate required for the dampers to protect safety related equipment. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 4, "External Events Screening Questions," dated June 19, 2012. The inspectors answered "yes" to question 1 of External Events screening questions since the finding could potentially degrade one train of the emergency power system (a risk-significant system). Thus the inspectors consulted the regional Senior Risk Analyst (SRA).

The SRA performed a detailed risk evaluation using the Point Beach Standardized Plant Analysis Risk Model Version 8.22. For there to be a risk increase due to this deficiency there would have to be a LOOP coincident with a flood event that renders the G-02 EDG unavailable. The SRA performed a bounding analysis assuming that the flood event occurred coincident with a LOOP. The exposure time for the deficient condition was not more than 15-days.

Assuming a 15-day exposure time, the delta CDF was 9.3E-08/yr. The dominant sequence involved a transient initiating event with a consequential LOOP and station blackout. Based on the result of the detailed risk evaluation, the issue was of very low risk significance.

This finding has a cross-cutting aspect of Training (H.9) in the area of human performance, for failing to provide training and ensure knowledge transfer to maintain a knowledgeable workforce. Specifically, the licensee did not ensure that personnel were knowledgeable of need to control material that could transport during an internal flooding event, restrict flood relief paths, and affect flood mitigation features.

Inspection Report# : [2014002](#) (*pdf*)

Significance: G Mar 06, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Take Corrective Actions to Address External Flooding Procedure Deficiencies

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," in that from March 13, 2013 until February 14, 2014, the licensee failed to assure that for a significant condition adverse to quality (SQAC), the cause of the condition was determined and corrective actions were taken to preclude repetition. Specifically, the licensee's corrective actions failed to preclude repetition of an SQAC where Procedure PC 80 Part 7, "Lake Water Level Determination," as implemented, would not protect safety-related equipment in the turbine building or Circulating Water Pump House (CWPH). After the licensee had taken corrective actions to improve the wave barrier procedure in response to an NRC-identified NOV, PC 80 Part 7 and other flood protection implementing procedures specified inadequate timelines to ensure wave

run-up flood barriers would be installed prior to the lake level at which wave run-up could impact the site. Corrective actions for this issue included changing the affected procedures to install the wave barriers at a lower lake level, changing the lake level determination surveillance from monthly to weekly, and reducing the allowed installation time for the barriers from 3 weeks to 1 week.

The performance deficiency was screened against the Reactor Oversight Process per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Procedure Quality, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee's failure to correct procedural deficiencies associated with flood barrier construction timelines, could challenge the timely installation of the barriers, which could impact the ability of mitigating systems to respond during an external flooding event. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A. Based on a review of Appendix A, Exhibit 2, Item 4.B, the inspectors determined that this issue screened as having very low safety significance (Green).

This finding has a cross-cutting aspect in the area of problem identification and resolution, because the licensee failed to thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance. (P.2)

Inspection Report# : [2014007](#) (pdf)

Significance: G Mar 06, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain External Flooding Procedure to Address All Possible CLB Floods

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," in that from January 19, 1996 until November 25, 2013, the licensee failed to ensure that activities affecting quality were prescribed by documented procedures of a type appropriate to the circumstances to address external flooding as described in the Final Safety Analysis Report (FSAR). Specifically, PC 80 Part 7, "Lake Water Level Determination" directed advanced installation of concrete barriers to protect against deep wave action from the lake, which introduced significant unrecognized blockages in the natural drainage path credited in the FSAR to protect against the probable maximum precipitation and Turbine Building internal flooding events. Corrective actions for this issue included changing the procedure and FSAR to include actions to provide an additional flood relief path through the CWPH building and reliance on internal flood relief dampers for the affected flooding events.

The performance deficiency was screened against the Reactor Oversight Process per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems

Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Procedure Quality, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee's failure to procedurally control external flooding design features to ensure they would not adversely affect the strategy for other flooding events, could negatively impact mitigating systems' ability to respond during external and internal flooding events. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A, and determined a detailed risk evaluation was required. Following a detailed risk evaluation, Region III SRAs determined that the finding had very low safety significance (Green). This finding has a cross-cutting aspect in the area of problem identification and resolution, because the licensee failed to take effective corrective actions to address issues in a timely manner commensurate with their safety significance. (P.3)
Inspection Report# : [2014007](#) (*pdf*)

Significance: G Mar 06, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a Required 10 CFR Part 50.59 Evaluation

The inspectors identified a finding of very low safety significance and associated Severity Level IV, non-cited violation of 10 CFR 50.59(d)(1), "Changes, tests and experiments," when, on November 25, 2013, the licensee failed to perform an evaluation against the criteria in 10 CFR 50.59(c)(2) for a change to procedure PC 80 Part 7 to include actions to maintain functionality of drainage paths during probable maximum precipitation and turbine building flooding events. Specifically, PC 80 Part 7, "Lake Water Level Determination" was changed to include actions to open the CWPH rollup doors to provide an additional drainage path while wave barriers were in place, without fully evaluating the viability of reliance on additional flood features not credited for external flooding in the Current License Basis (CLB). Corrective actions for this issue included to updating the FSAR to describe the new flood paths, performing a 10 CFR 50.59 screening and 10 CFR 50.59 evaluation for the new drainage path which had put the site outside of the CLB, revising a related functionality assessment, controlling external flooding areas to ensure they are clear of debris, and creating a procedure to install curtains on the CWPH rollup doors during periods when they were required to be open.

The inspectors determined that the licensee's failure to fully evaluate the viability of newly created flooding drainage paths as required by 10 CFR 50.59(d)(1) was a performance deficiency. The inspectors evaluated the performance deficiency using traditional enforcement in conjunction with the SDP because the performance deficiency had the potential to impact the regulatory process. The performance deficiency was screened per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Design Control, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee did not fully demonstrate that the availability, reliability, and capability of mitigating systems would be maintained during flooding events due to the site's failure to evaluate the viability of alternate flood drainage paths through the CWPH. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A. Based on a review of Appendix A, Exhibit 2, Item 4.B, the inspectors determined that this issue screened as having very low safety significance (Green). Additionally, in accordance with

Section 6.1.d.2 of the NRC Enforcement Policy, this violation is categorized as a Severity Level IV because the resulting conditions were evaluated as having very low safety significance (Green) by the SDP. This finding has a cross-cutting aspect in the area of problem identification and resolution, because the licensee failed to thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance. (P.2)

Inspection Report# : [2014007](#) (*pdf*)

Significance:  Mar 06, 2014

Identified By: NRC

Item Type: FIN Finding

Failure to Perform a Required 10 CFR Part 50.59 Evaluation

The inspectors identified a finding of very low safety significance and associated Severity Level IV, non-cited violation of 10 CFR 50.59(d)(1), “Changes, tests and experiments,” when, on November 25, 2013, the licensee failed to perform an evaluation against the criteria in 10 CFR 50.59(c)(2) for a change to procedure PC 80 Part 7 to include actions to maintain functionality of drainage paths during probable maximum precipitation and turbine building flooding events. Specifically, PC 80 Part 7, “Lake Water Level Determination” was changed to include actions to open the CWPH rollup doors to provide an additional drainage path while wave barriers were in place, without fully evaluating the viability of reliance on additional flood features not credited for external flooding in the Current License Basis (CLB). Corrective actions for this issue included to updating the FSAR to describe the new flood paths, performing a 10 CFR 50.59 screening and 10 CFR 50.59 evaluation for the new drainage path which had put the site outside of the CLB, revising a related functionality assessment, controlling external flooding areas to ensure they are clear of debris, and creating a procedure to install curtains on the CWPH rollup doors during periods when they were required to be open.

The inspectors determined that the licensee’s failure to fully evaluate the viability of newly created flooding drainage paths as required by 10 CFR 50.59(d)(1) was a performance deficiency. The inspectors evaluated the performance deficiency using traditional enforcement in conjunction with the SDP because the performance deficiency had the potential to impact the regulatory process. The performance deficiency was screened per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Design Control, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee did not fully demonstrate that the availability, reliability, and capability of mitigating systems would be maintained during flooding events due to the site’s failure to evaluate the viability of alternate flood drainage paths through the CWPH. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A. Based on a review of Appendix A, Exhibit 2, Item 4.B, the inspectors determined that this issue screened as having very low safety significance (Green). Additionally, in accordance with

Section 6.1.d.2 of the NRC Enforcement Policy, this violation is categorized as a Severity Level IV because the resulting conditions were evaluated as having very low safety significance (Green) by the SDP.

Inspection Report# : [2014007](#) (*pdf*)

Significance:  Mar 06, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Establish EFR Attributes to Assess the Effectiveness of Corrective Actions

The inspectors identified a finding of very low safety significance (Green) and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” for the failure to ensure the effectiveness review attributes for a significant condition adverse to quality would ensure the corrective actions would eliminate or reduce the recurrence rate.

The inspectors determined that the licensee’s failure to establish effectiveness review criteria that would have identified whether the corrective action to prevent recurrence (CAPRs) had effectively resolved the conditions was a performance deficiency warranting further review. The inspectors determined that this finding was more than minor in accordance with IMC 0612, Appendix B, because it was affected the Mitigating Systems Cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. If left uncorrected, would the performance deficiency have the potential to lead to a more significant

safety concern? The inspectors evaluated the finding using IMC 0609, Appendix A. The inspectors determined the finding was of very low safety significance (Green) because the finding was not a deficiency affecting the design or qualification of a mitigating structure, system or component and did not result in a loss of operability or functionality. In addition, the finding did not represent a loss of system or function, did not represent an actual loss of function of a least a single train for longer than its technical specification allowed outage time, and did not represent an actual loss of function of one or more nontechnical specification trains of equipment designated as high safety-significance. The finding had a cross cutting aspect in the area of problem identification and resolution, specifically resolution, because licensee personnel failed to ensure the corrective actions to prevent recurrence had effective attributes. (P.2) Inspection Report# : [2014007](#) (pdf)

Significance: **G** Dec 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Maintenance and Test Equipment Procedure

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to follow procedure NP 8.7.1, "Measurement and Test Equipment [M&TE]." Specifically, the inspectors identified multiple examples where the licensee did not document the withdrawal and use of M&TE in either the M&TE usage log or its electronic equivalent. This issue was entered into the licensee's corrective action program (CAP) as action request (AR) 01925171.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, "Issue Screening," dated September 7, 2012, because, if left uncorrected, the performance deficiency had the potential to lead to a more significant safety concern. Specifically, without accurate M&TE usage logs the licensee may not evaluate all past surveillances affected by failed M&TE, potentially resulting in a failed TS surveillance going undetected. The inspectors determined that the finding was associated with the Mitigating Systems Cornerstone, because not evaluating the prior use of inaccurate M&TE could permit equipment required to mitigate the consequences of the accident to not perform its design and licensing basis functions when called upon. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. The inspectors concluded that this finding has a cross-cutting aspect in the area of human performance, decision making, because the licensee failed to effectively communicate the station expectations related to changes in responsibilities for implementing NP 8.7.1.

Inspection Report# : [2013005](#) (pdf)

Significance: **W** Mar 31, 2013

Identified By: NRC

Item Type: VIO Violation

Failure to Establish an Adequate Procedure to Implement Wave Run-Up Design Features

A WHITE finding and a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors in that from January 19, 1996 until March 13, 2013, the licensee failed to have a procedure appropriate to the circumstances to address external flooding as described in the Final Safety Analysis Report (FSAR.) Specifically, Procedure PC 80 Part 7, as implemented, would not protect safety-related equipment in the turbine building or pumphouse because the procedure (1) did not appropriately prescribe the installation of barriers such that gaps in or between the barriers were eliminated to prevent water intrusion, (2) did not protect equipment by requiring barriers to be placed in front of the doors, from 1996 to 2008, as described in the FSAR, and (3) did not require the barriers to protect the plant to an elevation of at least 9 feet (589 foot elevation) as

described in the FSAR.

The performance deficiency was screened against the Reactor Oversight Process per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Procedure Quality, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee's failure to procedurally control and maintain external flooding design features and to provide procedural controls for external events could negatively impact mitigating systems' ability to respond to an external flooding event. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A, and determined a detailed risk evaluation was needed. This finding does not present an immediate safety concern, in that, the licensee has taken corrective action and revised procedures implementing wave run-up protection features. Specifically, the licensee's procedure has been revised to direct the installation of jersey barriers in conjunction with the use of sandbags, existing jersey barriers have been modified, and sandbags and additional jersey barriers have been purchased and pre-staged. These issues are being characterized as an apparent violation in accordance with the NRC's Enforcement Policy, with its final significance to be dispositioned in separate future correspondence. This finding has a cross cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to thoroughly evaluate problems such that the resolutions address causes and extent of conditions [P.1 (c)].

Inspection Report# : [2013002](#) (*pdf*)

Inspection Report# : [2013011](#) (*pdf*)

Inspection Report# : [2013012](#) (*pdf*)

Inspection Report# : [2014007](#) (*pdf*)

Barrier Integrity

Significance:  Sep 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Operability/Functionality Evaluation Process Following Radiation Monitor Failure

The inspectors identified a finding of very low safety significance and an associated NCV of 10 CFR Part 50, Appendix B, Criterion V, for the licensee's failure to follow procedure EN AA 203 1001, "Operability Determinations/Functionality Assessments." Specifically, when the Unit 1 main steam line A release monitor, 1RE 232, went into high alarm due to high ambient temperatures, the licensee's immediate functionality determination failed to evaluate the potential impact of the degraded state of the radiation monitor in the emergency plan. Additionally, a functionality assessment was not requested as specified by the procedure. This issue was entered into the licensee's corrective action program (CAP) as action request (AR) 01902921.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, because if left uncorrected, the failure to perform operability and functionality evaluations, and to recognize conditions that could render equipment inoperable, had the potential to lead to a more significant concern. The inspectors determined that the finding was associated with the Barrier Integrity Cornerstone, because the main steam line radiation monitor provides reasonable assurance that physical design barriers protect the public from radionuclide releases. The inspectors determined the finding to be of very low safety significance in accordance with IMC 0609, Appendix A, Exhibit 1, because they answered "No" to the questions under the Barrier Integrity screening questions. The inspectors concluded that this finding has a cross-cutting aspect in the area of human performance, decision making, because the

licensee failed to use conservative assumptions in decision making after the receipt of the unexpected high alarm on IRE 232 and did not request a functionality assessment to ensure that the condition and proposed actions were fully understood. Specifically, operations personnel did not request a documented evaluation to support understanding why the alarming monitor did not affect the functionality of the instrument as it related to the instrument's emergency plan functions. (H.1 (b))

Inspection Report# : [2013004](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Significance:  Sep 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Update FSAR for Radioactive Waste Storage Changes (2RS8)

The inspectors identified a finding of very low safety significance and an associated Severity Level IV (SL-IV) NCV of 10 CFR 50.71(e), "Maintenance of Records, Making of Reports," for the licensee's failure to comply with the requirements to periodically update the Final Safety Analysis Report (FSAR) to include an accurate description of the site's solid waste management system and radiation monitoring system as a result of modifications made to the site. This issue was entered into the licensee's CAP as AR01898640 and AR01898643.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, because if left uncorrected, this could lead to a more significant safety concern because future changes to the facility, procedures, and programs would not be able to consider the licensing basis information that was removed or never inserted. The finding was determined to be of very low safety significance (Green) in accordance with IMC 0609, Appendix D, "Public Radiation Safety Cornerstone Significance Determination Process," because it involved radioactive material control but did not result in public exposure greater than 5 mrem [millirem]. Additionally, using IMC 0612, Appendix B, "Issue Screening," the inspectors determined that the violation of 10 CFR 50.71(e) could be dispositioned using traditional enforcement because it had the potential to impact the NRC's ability to perform its regulatory function. The violation was determined to be a SL-IV violation using the NRC's Enforcement Policy, Section 6.1, because the inaccurate information was not used to make an unacceptable change to the facility procedures. The inspectors concluded that this finding did not have an associated cross-cutting aspect.

Inspection Report# : [2013004](#) (*pdf*)

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security

Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : August 29, 2014

Point Beach 2

3Q/2014 Plant Inspection Findings

Initiating Events

Significance:  Sep 30, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Required Fire Watch Inspections

The inspectors identified a finding of very low safety significance and associated NCV of license condition 4.F for the failure to conduct required fire watch inspections. Specifically, the licensee failed to inspect multiple fire zones at the correct frequency and to identify work activities that could introduce potential ignition sources, combustible materials, and other abnormal activities that could introduce an increased likelihood of a fire starting in the fire zone. The licensee implemented short term corrective actions, which included issuing guidance to personnel that prescribed a specific route and general timeframe for performing fire watch inspections, as well as, requiring the fire watches to initial for each individual fire zone for each inspection.

The finding was determined to be more than minor because the failure to conduct the required fire watch inspections was associated with the Initiating Events cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). The inspectors evaluated the finding in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Screening and Characterization of Findings," Table 3, "SDP Appendix Router." In Question 2 of Section E, "Fire Protection," the inspectors answered "yes" to the screening question "Does the finding involve: 1) A failure to adequately implement fire prevention and administrative controls for transient combustible materials, transient ignition sources, or hot work activities?" Therefore, a detailed risk evaluation was performed by the Senior Reactor Analysts (SRAs) using IMC 0609, Appendix F, "Fire Protection Significance Determination Process," and the licensee's preliminary NFPA-805 analyses as described in Section 1R05.1. Based on the detailed risk evaluation, the SRAs determined that the finding was of very low safety significance. This finding has a cross-cutting aspect of Avoid Complacency (H.12), in the area of human performance, for failing implement appropriate error reduction tools.

Inspection Report# : [2014004](#) (*pdf*)

Significance:  Mar 31, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

A Failure to Provide Sufficient Field Overlap to Ensure 100 Percent Coverage

The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion IX, "Control of Special Processes," for a failure to provide sufficient magnetic field overlap to ensure 100 percent coverage while performing a magnetic particle examination (MT) on a steam generator feedwater nozzle weld. The examiner reexamined the area to meet the Code coverage and entered the issue into its Corrective Action Program (CAP) as action request (AR) 01951316.

The inspectors determined that this issue was more than minor in accordance with IMC 0612, Appendix B, "Issue Screening," dated September 7, 2012, because the inspectors answered "yes" to the More-than-Minor question, "If left uncorrected, would the performance deficiency have the potential to lead to a more significant safety concern".

Specifically, the required MT examination coverage/overlap was not verified/measured but rather assumed to be adequate by the examiner, and absent NRC intervention, would have returned the component to service for an indefinite period of service, which would have placed the nozzle/piping at increased risk for undetected cracking, leakage or component failure. In accordance with Table 2, “Cornerstones Affected by Degraded Condition or Programmatic Weakness,” of IMC 609, Attachment 4, “Initial Characterization of Findings,” issued June 19, 2012, the inspectors checked the box under the Initiating Events Cornerstone because leakage at this feedwater piping could be a transient initiator contributor.

The inspectors determined this finding was of very low safety significance (Green) based on answering “no” to the questions in Part A of Exhibit 1, “Initiating Events Screening Questions,” in IMC 0609, Attachment A, “The Significance Determination Process for Findings At-Power,” issued on June 19, 2012. Specifically, the inspectors answered “no” to the screening question, “Did the finding cause a reactor trip AND the loss of mitigation equipment relied upon to transition the plant from the onset of the trip to a stable shutdown condition (e.g., loss of condenser, loss of feedwater)”. The inspectors answered no to this question because the examiner re-examined the area of incomplete coverage and did not identify rejectable flaws. The inspectors determined that the primary cause of the failure to ensure sufficient field overlap while performing a MT examination was related to the cross-cutting component of Human Performance, “Field Presence,” because the licensee failed to provide oversight of work activities; including contractors and supplemental personnel. Specifically, proper oversight at the pre-job brief would have ensured the issue of overlap was discussed and understood.

The inspectors determined that proper oversight at the pre-job brief could have ensured the issue of overlap was discussed and understood. Additionally, good direct oversight of the test could have provided the ability to reinforce the correct method of performing the test as well as enabling the site to discover the error instead of the inspector identifying the problem [H.2].

Inspection Report# : [2014002](#) (pdf)

Significance:  Jun 30, 2013

Identified By: NRC

Item Type: FIN Finding

Failure to Control Materials Classified as High Winds/Tornado Hazards

The inspectors identified a finding of very low safety significance for the licensee’s failure to maintain control over the proper storage and placement of materials that were classified as high winds/tornado hazards, in accordance with procedure NP 1.9.6, “Plant Cleanliness and Storage.” Specifically, the inspectors identified that the licensee failed to perform weekly high wind missile hazards inspections since April 17, 2013. As a result, unsecured wooden pallets, wooden planks, metal rods and a metallic desk were discovered by the inspectors near Units 1 and 2 transformer areas. The issue was entered into the licensee’s corrective action program (CAP) for resolution as action request AR01882921. The licensee took immediate corrective action to remove and/or properly store the material after the tornado warning on June 17, 2013.

The inspectors determined the finding to be more than minor in accordance with IMC 0612, Appendix B, because if left uncorrected, the unsecured items would have the potential to lead to a more significant safety concern during high wind and tornado events. The inspectors determined the finding to be of very low safety significance because the inspectors answered “No” to each question listed in IMC 0609, Appendix A, Exhibit 1, “Initiating Event Screening Questions.” The inspectors determined that the finding has a cross cutting aspect in the area of human performance, work practices, because the licensee did not provide supervisory or management oversight of work activities such that nuclear safety was supported. Specifically, the licensee failed to provide appropriate oversight of work activities such that, when the program owner of the weekly high wind inspection changed, the requirement to perform weekly high winds tornado hazard walkdowns was not understood (H.4(c)).

Inspection Report# : [2013003](#) (pdf)

Mitigating Systems

Significance:  Sep 30, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Identify Degraded Water Sprinkler System

The inspectors identified a finding of very low safety significance and associated NCV of license condition 4.F for the licensee's failure to identify a degraded water sprinkler system in the service water pump room and implement hourly fire watch inspections. Specifically, the licensee installed scaffolding in the service water pump room that interfered with the operation of the water sprinkler system and failed to implement hourly fire watch inspections as a compensatory measure. The licensee began fire watch inspections and credited installed fire hoses in the area for backup suppression until the planking could be removed from the scaffolding.

The finding was determined to be more than minor because the failure to identify the degraded sprinkler system and implement compensatory fire watch inspections was associated with the Mitigating Systems cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). In accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding degraded fire protection defense-in-depth strategies, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors screened the issue to Green under the Phase 1 Screening Question 1.3.1-A, because the inspectors determined that the impact of a fire would be limited to one train/division of service water pumps and a credited safe shutdown path would be unaffected. This finding has a cross-cutting aspect of Procedure Adherence (H.8), in the area of human performance, because the licensee did not follow processes, procedures, and work instructions.

Inspection Report# : [2014004](#) (*pdf*)

Significance:  Sep 30, 2014

Identified By: NRC

Item Type: FIN Finding

Incomplete Prompt Operability Determination of Non-Seismic Block Wall

The inspectors identified a finding of very low safety significance due to the licensee's failure to follow procedure EN AA 203 1001, "Operability Determinations/Functionality Assessments." Specifically, when the licensee identified that the north non-vital switchgear (NVSGR) block wall was found to be non-seismic and potentially susceptible to collapsing and blocking the flood relief dampers, they failed to evaluate all potential water sources that could spray or flood the NVSGR and cascade into the vital switchgear room below. Following questions by the inspectors, the licensee evaluated the additional water sources; isolated two additional fire protection hose reels on the south side of the NVSGR; and updated the prompt operability determination (POD).

The finding was determined to be more than minor because the failure to evaluate and disposition each potential flood source in the POD was associated with the Mitigating Systems cornerstone attribute of Protection Against External Events (Seismic) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 4, "External Events Screening Questions," dated June 19, 2012. The inspectors answered "yes" to question 1 of External Events screening questions since the finding could potentially degrade one train of the emergency power system. The inspectors consulted the regional SRA, who completed a detailed risk evaluation, and determined that the finding was of very low safety-significance. This finding has a cross-cutting aspect of Identification (P.1), in the area of problem identification and resolution, for failing to identify issues completely, accurately, and in a timely manner in accordance with the

program.

Inspection Report# : [2014004](#) (*pdf*)

Significance:  Jun 30, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain Control of Loose Material in Containment

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the failure to follow procedures. Specifically, while Unit 2 was in Mode 3, the licensee left buoyant items in containment that were neither anchored or tethered to a substantial structure nor located in an anchored storage box or receptacle, as required by NP 7.2.28, "Containment Debris Control Program," Revision 5, Step 4.2.8(d)3. The licensee entered the issue into their corrective action program (CAP) and implemented short term corrective actions, which included removing the material from containment and communicating to station personnel the importance of not leaving susceptible material unattended in containment while in Modes 1 through 4. The licensee's long-term corrective actions included creating a site specific procedure that places all the containment debris control requirements in one central location. The inspectors determined that the finding was more than minor, because it was associated with the Equipment Performance attribute of the Mitigating Systems cornerstone. The finding adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At Power," Exhibit 2, Mitigating Systems Screening Questions, dated June 19, 2012. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross cutting aspect of Training (H.9), in the area of Human Performance, for failing to provide training and ensure knowledge transfer to maintain a knowledgeable workforce.

Inspection Report# : [2014003](#) (*pdf*)

Significance:  Jun 30, 2014

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Age Related Relay Failures Result in Inoperable Inverters

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was self-revealed for the failure to replace safety-related inverter components at the vendor prescribed 10 year frequency. Specifically, after concluding that safety-related inverter relays were required to be replaced at a 10-year frequency, per vendor direction, the licensee failed to promptly replace the remaining relays that were eighteen years old or evaluate if the relays could remain in service until the next scheduled 10 year inverter overhaul. The licensee entered the issue into their CAP and replaced the remaining K2 relays that were past their 10-year replacement frequency in April and June of 2014 and has plans to replace the remaining K1 relays, which provide alarm only function, in 2015.

The inspectors determined finding was more than minor because it was associated with the Equipment Performance attribute of the Mitigating System cornerstone and affected the cornerstone objective of ensuring the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the performance deficiency resulted in three additional K2 relay failures in 2013 and 2014, two of which occurred while the inverters were carry instrument bus loads and caused the inoperability of the associated inverters. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings." Because the finding impacted the Mitigating Systems Cornerstone, the inspectors screened the finding through IMC 0609, Appendix A, "The

Significance Determination Process for Findings At-Power,” using Exhibit 2, “Mitigating Systems Screening Questions.” The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered “No” to the Mitigating Systems screening questions. This finding has a cross cutting aspect of Resolution (P.3), in the area of Problem Identification and Resolution because the licensee failed to take effective corrective actions to address issues in a timely manner commensurate with their safety significance.

Inspection Report# : [2014003](#) (*pdf*)

Significance:  Mar 31, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Measure Interpass Temperature

The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion IX, “Control of Special Processes,” for a failure to measure the interpass temperature while performing welding on the auxiliary feedwater (AFW) piping system in accordance with welding procedure specifications (WPS) FP-PE-B31-P1P1-GTSM-001. Consequently, welding was performed without the Code and procedure required interpass temperature being monitored on a number of welds, a parameter which can affect the mechanical properties of the material being welded. To restore compliance, the welder proceeded to measure the interpass temperature and ensured that the temperature requirement would not have been exceeded. The licensee entered this issue into their CAP as AR 01950601.

The inspectors determined that this issue was more than minor in accordance with IMC 0612, Appendix B, “Issue Screening,” dated September 7, 2012, because the inspectors answered “yes” to the More-than-Minor question, “If left uncorrected, would the performance deficiency have the potential to lead to a more significant safety concern”. Specifically, absent NRC intervention, the welder would have completed all of the welds without having measured the interpass temperature, a welding parameter which can affect the mechanical properties (e.g., impact properties) of some materials being welded, and could lead to a potential failure of the weld in service. In accordance with Table 2, “Cornerstones Affected by Degraded Condition or Programmatic Weakness,” of IMC 609, Attachment 4, “Initial Characterization of Findings,” issued June 19, 2012, the inspectors checked the box under the Mitigating Systems Cornerstone because leakage at this AFW piping could degrade short term heat removal. The inspectors determined this finding was of very low safety significance (Green) based on answering “no” to the questions in Part A of Exhibit 1, “Mitigating Systems Screening Questions,” in IMC 0609, Attachment A, “The Significance Determination Process for Findings At-Power,” issued on June 19, 2012. Specifically, the inspectors answered, “yes” to the screening question “If the finding is a deficiency affecting the design or qualification of a mitigating structures systems component (SSC), does the SSC maintain its operability or functionality”. The welder subsequently performed interpass temperature measurements and demonstrated that the temperature would remain below the required temperature of the welds in question, and the issue did not result in the actual loss of the operability or functionality of a safety system.

The inspectors determined that the primary cause of the failure to measure the interpass temperature in accordance with WPS FP-PE-B31-P1P1-GTSM-001 was related to the cross-cutting component of Problem Identification and Resolution, P.4 “Trending”. The organization failed to periodically analyze information from the corrective action program and other assessments in the aggregate to identify programmatic and common cause issues. Point Beach had experienced a number of issues related to welding in the weeks before the interpass temperature issue, leading to some 19 welding-related action request (ARs) being written. The total of these issues presented the site with the opportunity to evaluate if there were problems with the conduct of the welding program. Resulting increased focus could have led to licensee identification of, or prevention of, the lack of taking temperatures.

Inspection Report# : [2014002](#) (*pdf*)

Significance:  Mar 31, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Flood Reviews of Material That Could Affect Flood Relief Paths

The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to follow procedures. Specifically, the licensee failed to perform a flood review, as required by NP 8.4.17, "PBNP Flooding Barrier / Relief Path Program," Revision 15, when work activities in the G-02 EDG room left a lightweight wet floor safety sign that could have been transported during a license basis internal flood event and affected the flow capacity of the flood relief slots. The licensee's short-term corrective actions included removing the material from the G-02 EDG room and communicating to station personnel the importance of not leaving susceptible material unattended. The licensee entered this issue into their CAP as AR 01960472.

The inspectors determined that the finding was more than minor, because, if left uncorrected, it could have the potential to become a more significant safety concern. Specifically, if the licensee was not performing flood reviews for material left unattended during or after work activities, susceptible unattended material could be transported to credited flood relief dampers and impeded the design flow rate required for the dampers to protect safety related equipment. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 4, "External Events Screening Questions," dated June 19, 2012. The inspectors answered "yes" to question 1 of External Events screening questions since the finding could potentially degrade one train of the emergency power system (a risk-significant system). Thus the inspectors consulted the regional Senior Risk Analyst (SRA).

The SRA performed a detailed risk evaluation using the Point Beach Standardized Plant Analysis Risk Model Version 8.22. For there to be a risk increase due to this deficiency there would have to be a LOOP coincident with a flood event that renders the G-02 EDG unavailable. The SRA performed a bounding analysis assuming that the flood event occurred coincident with a LOOP. The exposure time for the deficient condition was not more than 15-days.

Assuming a 15-day exposure time, the delta CDF was 9.3E-08/yr. The dominant sequence involved a transient initiating event with a consequential LOOP and station blackout. Based on the result of the detailed risk evaluation, the issue was of very low risk significance.

This finding has a cross-cutting aspect of Training (H.9) in the area of human performance, for failing to provide training and ensure knowledge transfer to maintain a knowledgeable workforce. Specifically, the licensee did not ensure that personnel were knowledgeable of need to control material that could transport during an internal flooding event, restrict flood relief paths, and affect flood mitigation features.

Inspection Report# : [2014002](#) (*pdf*)

Significance: G Mar 06, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Take Corrective Actions to Address External Flooding Procedure Deficiencies

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," in that from March 13, 2013 until February 14, 2014, the licensee failed to assure that for a significant condition adverse to quality (SQAC), the cause of the condition was determined and corrective actions were taken to preclude repetition. Specifically, the licensee's corrective actions failed to preclude repetition of an SQAC where Procedure PC 80 Part 7, "Lake Water Level Determination," as implemented, would not protect safety-related equipment in the turbine building or Circulating Water Pump House (CWPH). After the licensee had taken corrective actions to improve the wave barrier procedure in response to an NRC-identified NOV, PC 80 Part 7 and other flood protection implementing procedures specified inadequate timelines to ensure wave

run-up flood barriers would be installed prior to the lake level at which wave run-up could impact the site. Corrective actions for this issue included changing the affected procedures to install the wave barriers at a lower lake level, changing the lake level determination surveillance from monthly to weekly, and reducing the allowed installation time for the barriers from 3 weeks to 1 week.

The performance deficiency was screened against the Reactor Oversight Process per the guidance of IMC 0612,

Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Procedure Quality, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee's failure to correct procedural deficiencies associated with flood barrier construction timelines, could challenge the timely installation of the barriers, which could impact the ability of mitigating systems to respond during an external flooding event. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A. Based on a review of Appendix A, Exhibit 2, Item 4.B, the inspectors determined that this issue screened as having very low safety significance (Green).

This finding has a cross-cutting aspect in the area of problem identification and resolution, because the licensee failed to thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance. (P.2)

Inspection Report# : [2014007](#) (pdf)

Significance:  Mar 06, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain External Flooding Procedure to Address All Possible CLB Floods

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," in that from January 19, 1996 until November 25, 2013, the licensee failed to ensure that activities affecting quality were prescribed by documented procedures of a type appropriate to the circumstances to address external flooding as described in the Final Safety Analysis Report (FSAR). Specifically, PC 80 Part 7, "Lake Water Level Determination" directed advanced installation of concrete barriers to protect against deep wave action from the lake, which introduced significant unrecognized blockages in the natural drainage path credited in the FSAR to protect against the probable maximum precipitation and Turbine Building internal flooding events. Corrective actions for this issue included changing the procedure and FSAR to include actions to provide an additional flood relief path through the CWPH building and reliance on internal flood relief dampers for the affected flooding events.

The performance deficiency was screened against the Reactor Oversight Process per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Procedure Quality, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee's failure to procedurally control external flooding design features to ensure they would not adversely affect the strategy for other flooding events, could negatively impact mitigating systems' ability to respond during external and internal flooding events. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A, and determined a detailed risk evaluation was required. Following a detailed risk evaluation, Region III SRAs determined that the finding had very low safety significance (Green). This finding has a cross-cutting aspect in the area of problem identification and resolution, because the licensee failed to take effective corrective actions to address issues in a timely manner commensurate with their safety significance. (P.3)

Inspection Report# : [2014007](#) (pdf)

Significance:  Mar 06, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform a Required 10 CFR Part 50.59 Evaluation

The inspectors identified a finding of very low safety significance and associated Severity Level IV, non-cited violation of 10 CFR 50.59(d)(1), "Changes, tests and experiments," when, on November 25, 2013, the licensee failed to perform an evaluation against the criteria in 10 CFR 50.59(c)(2) for a change to procedure

PC 80 Part 7 to include actions to maintain functionality of drainage paths during probable maximum precipitation and turbine building flooding events. Specifically, PC 80 Part 7, "Lake Water Level Determination" was changed to include actions to open the CWPB rollup doors to provide an additional drainage path while wave barriers were in place, without fully evaluating the viability of reliance on additional flood features not credited for external flooding in the Current License Basis (CLB). Corrective actions for this issue included to updating the FSAR to describe the new flood paths, performing a 10 CFR 50.59 screening and 10 CFR 50.59 evaluation for the new drainage path which had put the site outside of the CLB, revising a related functionality assessment, controlling external flooding areas to ensure they are clear of debris, and creating a procedure to install curtains on the CWPB rollup doors during periods when they were required to be open.

The inspectors determined that the licensee's failure to fully evaluate the viability of newly created flooding drainage paths as required by 10 CFR 50.59(d)(1) was a performance deficiency. The inspectors evaluated the performance deficiency using traditional enforcement in conjunction with the SDP because the performance deficiency had the potential to impact the regulatory process. The performance deficiency was screened per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Design Control, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee did not fully demonstrate that the availability, reliability, and capability of mitigating systems would be maintained during flooding events due to the site's failure to evaluate the viability of alternate flood drainage paths through the CWPB. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A. Based on a review of Appendix A, Exhibit 2, Item 4.B, the inspectors determined that this issue screened as having very low safety significance (Green). Additionally, in accordance with

Section 6.1.d.2 of the NRC Enforcement Policy, this violation is categorized as a Severity Level IV because the resulting conditions were evaluated as having very low safety significance (Green) by the SDP. This finding has a cross-cutting aspect in the area of problem identification and resolution, because the licensee failed to thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance. (P.2)

Inspection Report# : [2014007](#) (pdf)

Significance:  Mar 06, 2014

Identified By: NRC

Item Type: FIN Finding

Failure to Perform a Required 10 CFR Part 50.59 Evaluation

The inspectors identified a finding of very low safety significance and associated Severity Level IV, non-cited violation of 10 CFR 50.59(d)(1), "Changes, tests and experiments," when, on November 25, 2013, the licensee failed to perform an evaluation against the criteria in 10 CFR 50.59(c)(2) for a change to procedure PC 80 Part 7 to include actions to maintain functionality of drainage paths during probable maximum precipitation and turbine building flooding events. Specifically, PC 80 Part 7, "Lake Water Level Determination" was changed to include actions to open the CWPB rollup doors to provide an additional drainage path while wave barriers were in place, without fully evaluating the viability of reliance on additional flood features not credited for external flooding in the Current License Basis (CLB). Corrective actions for this issue included to updating the FSAR to describe the new flood paths, performing a 10 CFR 50.59 screening and 10 CFR 50.59 evaluation for the new drainage path which had put the site outside of the CLB, revising a related functionality assessment, controlling external flooding areas to ensure they are clear of debris, and creating a procedure to install curtains on the CWPB rollup doors during periods when they were required to be open.

The inspectors determined that the licensee's failure to fully evaluate the viability of newly created flooding drainage paths as required by 10 CFR 50.59(d)(1) was a performance deficiency. The inspectors evaluated the performance

deficiency using traditional enforcement in conjunction with the SDP because the performance deficiency had the potential to impact the regulatory process. The performance deficiency was screened per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Design Control, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee did not fully demonstrate that the availability, reliability, and capability of mitigating systems would be maintained during flooding events due to the site's failure to evaluate the viability of alternate flood drainage paths through the CWPH. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A. Based on a review of Appendix A, Exhibit 2, Item 4.B, the inspectors determined that this issue screened as having very low safety significance (Green). Additionally, in accordance with

Section 6.1.d.2 of the NRC Enforcement Policy, this violation is categorized as a Severity Level IV because the resulting conditions were evaluated as having very low safety significance (Green) by the SDP.

Inspection Report# : [2014007](#) (pdf)

Significance:  Mar 06, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Establish EFR Attributes to Assess the Effectiveness of Corrective Actions

The inspectors identified a finding of very low safety significance (Green) and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to ensure the effectiveness review attributes for a significant condition adverse to quality would ensure the corrective actions would eliminate or reduce the recurrence rate.

The inspectors determined that the licensee's failure to establish effectiveness review criteria that would have identified whether the corrective action to prevent recurrence (CAPRs) had effectively resolved the conditions was a performance deficiency warranting further review. The inspectors determined that this finding was more than minor in accordance with IMC 0612, Appendix B, because it was affected the Mitigating Systems Cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. If left uncorrected, would the performance deficiency have the potential to lead to a more significant safety concern? The inspectors evaluated the finding using IMC 0609, Appendix A. The inspectors determined the finding was of very low safety significance (Green) because the finding was not a deficiency affecting the design or qualification of a mitigating structure, system or component and did not result in a loss of operability or functionality. In addition, the finding did not represent a loss of system or function, did not represent an actual loss of function of a least a single train for longer than its technical specification allowed outage time, and did not represent an actual loss of function of one or more nontechnical specification trains of equipment designated as high safety-significance. The finding had a cross cutting aspect in the area of problem identification and resolution, specifically resolution, because licensee personnel failed to ensure the corrective actions to prevent recurrence had effective attributes. (P.2)

Inspection Report# : [2014007](#) (pdf)

Significance:  Dec 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Maintenance and Test Equipment Procedure

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to follow procedure NP 8.7.1, "Measurement and Test Equipment [M&TE]." Specifically, the inspectors identified multiple examples where the licensee did not document the withdrawal and use of M&TE in either the M&TE usage log or its electronic equivalent. This issue was entered into the licensee's corrective action program (CAP) as action request

(AR) 01925171.

The finding was determined to be more than minor in accordance with IMC 0612, Appendix B, "Issue Screening," dated September 7, 2012, because, if left uncorrected, the performance deficiency had the potential to lead to a more significant safety concern. Specifically, without accurate M&TE usage logs the licensee may not evaluate all past surveillances affected by failed M&TE, potentially resulting in a failed TS surveillance going undetected. The inspectors determined that the finding was associated with the Mitigating Systems Cornerstone, because not evaluating the prior use of inaccurate M&TE could permit equipment required to mitigate the consequences of the accident to not perform its design and licensing basis functions when called upon. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. The inspectors concluded that this finding has a cross-cutting aspect in the area of human performance, decision making, because the licensee failed to effectively communicate the station expectations related to changes in responsibilities for implementing NP 8.7.1.

Inspection Report# : [2013005](#) (*pdf*)

Significance: **W** Mar 31, 2013

Identified By: NRC

Item Type: VIO Violation

Failure to Establish an Adequate Procedure to Implement Wave Run-Up Design Features

A WHITE finding and a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors in that from January 19, 1996 until March 13, 2013, the licensee failed to have a procedure appropriate to the circumstances to address external flooding as described in the Final Safety Analysis Report (FSAR.) Specifically, Procedure PC 80 Part 7, as implemented, would not protect safety-related equipment in the turbine building or pumphouse because the procedure (1) did not appropriately prescribe the installation of barriers such that gaps in or between the barriers were eliminated to prevent water intrusion, (2) did not protect equipment by requiring barriers to be placed in front of the doors, from 1996 to 2008, as described in the FSAR, and (3) did not require the barriers to protect the plant to an elevation of at least 9 feet (589 foot elevation) as described in the FSAR.

The performance deficiency was screened against the Reactor Oversight Process per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Procedure Quality, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee's failure to procedurally control and maintain external flooding design features and to provide procedural controls for external events could negatively impact mitigating systems' ability to respond to an external flooding event. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A, and determined a detailed risk evaluation was needed. This finding does not present an immediate safety concern, in that, the licensee has taken corrective action and revised procedures implementing wave run-up protection features. Specifically, the licensee's procedure has been revised to direct the installation of jersey barriers in conjunction with the use of sandbags, existing jersey barriers have been modified, and sandbags and additional jersey barriers have been purchased and pre-staged. These issues are being characterized as an apparent violation in accordance with the NRC's Enforcement Policy, with its final significance to be dispositioned in separate future correspondence. This finding has a cross cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to thoroughly evaluate problems such that the resolutions address causes and extent of conditions [P.1 (c)].

Inspection Report# : [2013002](#) (pdf)

Inspection Report# : [2013011](#) (pdf)

Inspection Report# : [2013012](#) (pdf)

Inspection Report# : [2014007](#) (pdf)

Barrier Integrity

Significance:  Sep 30, 2014

Identified By: NRC

Item Type: FIN Finding

Deficiencies in Calculation Performed to Support Containment Dome Truss Operability

The inspectors identified a finding of very low safety significance for deficiencies in licensee's calculation performed to support operability of the unit 1 containment building dome truss and the safety related components supported from the truss. The licensee reassessed the dome truss members and connections that were found to be highly stressed and concluded that the components remained within the acceptable limits. The licensee initiated AR 01986069 to capture the concern identified by the inspectors and revised the POD.

The finding was determined to be more than minor because the finding is associated with the RCS Equipment and Barrier Performance Attribute of the Barrier Integrity cornerstone and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. Specifically, failure of the dome truss could impact the reliability/availability of the containment spray system to maintain operability of the containment. Additionally, More than Minor Example 3.j of IMC 0612, Appendix E, "Examples of Minor Issues," was used to inform the answer to this more than minor screening question. Specifically, the licensee's failure to address torsional effects and use of non conservative allowable stress values for evaluation of containment dome truss components, at the time of discovery, resulted in reasonable doubt of the operability of the subject walls. In accordance with IMC 0609, "Significance Determination Process," Attachment 4, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Barrier Integrity cornerstone. As a result, the inspectors determined the finding could be evaluated using IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 3. Because the finding did not represent an actual failure of a component required to maintain containment integrity, the inspectors answered "no" to Screening Questions 1 and 2 for the Reactor Containment section, and determined the finding was of very low safety significance. This finding has a cross cutting aspect of Conservative Bias (H.14) in the area of human performance for the licensee's failure to use conservative decision making practices in the operability evaluation of the containment dome truss.

Inspection Report# : [2014004](#) (pdf)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : November 26, 2014

Point Beach 2

4Q/2014 Plant Inspection Findings

Initiating Events

Significance: G Sep 30, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Perform Required Fire Watch Inspections

The inspectors identified a finding of very low safety significance and associated NCV of license condition 4.F for the failure to conduct required fire watch inspections. Specifically, the licensee failed to inspect multiple fire zones at the correct frequency and to identify work activities that could introduce potential ignition sources, combustible materials, and other abnormal activities that could introduce an increased likelihood of a fire starting in the fire zone. The licensee implemented short term corrective actions, which included issuing guidance to personnel that prescribed a specific route and general timeframe for performing fire watch inspections, as well as, requiring the fire watches to initial for each individual fire zone for each inspection.

The finding was determined to be more than minor because the failure to conduct the required fire watch inspections was associated with the Initiating Events cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). The inspectors evaluated the finding in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Screening and Characterization of Findings," Table 3, "SDP Appendix Router." In Question 2 of Section E, "Fire Protection," the inspectors answered "yes" to the screening question "Does the finding involve: 1) A failure to adequately implement fire prevention and administrative controls for transient combustible materials, transient ignition sources, or hot work activities?" Therefore, a detailed risk evaluation was performed by the Senior Reactor Analysts (SRAs) using IMC 0609, Appendix F, "Fire Protection Significance Determination Process," and the licensee's preliminary NFPA-805 analyses as described in Section 1R05.1. Based on the detailed risk evaluation, the SRAs determined that the finding was of very low safety significance. This finding has a cross-cutting aspect of Avoid Complacency (H.12), in the area of human performance, for failing implement appropriate error reduction tools.

Inspection Report# : [2014004](#) (*pdf*)

Significance: G Mar 31, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

A Failure to Provide Sufficient Field Overlap to Ensure 100 Percent Coverage

The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion IX, "Control of Special Processes," for a failure to provide sufficient magnetic field overlap to ensure 100 percent coverage while performing a magnetic particle examination (MT) on a steam generator feedwater nozzle weld. The examiner reexamined the area to meet the Code coverage and entered the issue into its Corrective Action Program (CAP) as action request (AR) 01951316.

The inspectors determined that this issue was more than minor in accordance with IMC 0612, Appendix B, "Issue Screening," dated September 7, 2012, because the inspectors answered "yes" to the More-than-Minor question, "If left uncorrected, would the performance deficiency have the potential to lead to a more significant safety concern".

Specifically, the required MT examination coverage/overlap was not verified/measured but rather assumed to be adequate by the examiner, and absent NRC intervention, would have returned the component to service for an indefinite period of service, which would have placed the nozzle/piping at increased risk for undetected cracking, leakage or component failure. In accordance with Table 2, “Cornerstones Affected by Degraded Condition or Programmatic Weakness,” of IMC 609, Attachment 4, “Initial Characterization of Findings,” issued June 19, 2012, the inspectors checked the box under the Initiating Events Cornerstone because leakage at this feedwater piping could be a transient initiator contributor.

The inspectors determined this finding was of very low safety significance (Green) based on answering “no” to the questions in Part A of Exhibit 1, “Initiating Events Screening Questions,” in IMC 0609, Attachment A, “The Significance Determination Process for Findings At-Power,” issued on June 19, 2012. Specifically, the inspectors answered “no” to the screening question, “Did the finding cause a reactor trip AND the loss of mitigation equipment relied upon to transition the plant from the onset of the trip to a stable shutdown condition (e.g., loss of condenser, loss of feedwater)”. The inspectors answered no to this question because the examiner re-examined the area of incomplete coverage and did not identify rejectable flaws. The inspectors determined that the primary cause of the failure to ensure sufficient field overlap while performing a MT examination was related to the cross-cutting component of Human Performance, “Field Presence,” because the licensee failed to provide oversight of work activities; including contractors and supplemental personnel. Specifically, proper oversight at the pre-job brief would have ensured the issue of overlap was discussed and understood.

The inspectors determined that proper oversight at the pre-job brief could have ensured the issue of overlap was discussed and understood. Additionally, good direct oversight of the test could have provided the ability to reinforce the correct method of performing the test as well as enabling the site to discover the error instead of the inspector identifying the problem [H.2].

Inspection Report# : [2014002](#) (*pdf*)

Mitigating Systems

Significance:  Dec 31, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Promptly Correct a Failed Emergency Diesel Generator Day Tank Room Heater (Section 1R01.1)

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion XVI, “Corrective Action,” was identified by the inspectors for the failure to promptly repair the non-functional HX-272A, a safety-related room heater for the G-04 Emergency Diesel Generator (EDG) day tank room. Specifically, HX-272A was identified failed in June 2012 and was not corrected until November 2014 but not before inspectors identified that the redundant room heater, HX-272B, had also failed and the room temperature had dropped below the design basis temperature of 50 degrees Fahrenheit. The licensee repaired HX 272A on November 25, 2014 and also installed a thermometer in the fuel oil day tank room for operators to monitor room temperature. The licensee entered the issue into their CAP as action request (AR) 02018260 and AR 02008296.

The inspectors determined that failing to promptly repair safety-related room heater, HX-272A, G-04 EDG day tank room heater was contrary to 10 CFR 50 Appendix B, Criterion XVI and was a performance deficiency. The inspectors determined that the finding was more than minor, because, if left uncorrected, it could have the potential to become a more significant safety concern. Specifically, the inspectors found both safety-related heaters non-functional in the fuel oil day tank room with outside air blowing into the room through a ventilation damper. The outside temperature was approximately 17 degrees Fahrenheit, and while the licensee determined that at the time their fuel oil cloud point was approximately zero degrees Fahrenheit, the licensee’s specification for fuel oil cloud point allowed for a fuel oil cloud point of up to 25 degrees Fahrenheit. Additionally, if the fuel oil day tank room temperatures dropped below freezing, the fire sprinkler piping within the room could have actuated and/or ruptured and adversely affected the

safety-related fuel oil transfer pumps within the room. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At Power," Exhibit 2, Mitigating Systems Screening Questions, dated June 19, 2012.

The inspectors concluded that the finding was of very low safety significance because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross cutting aspect of Work Management (H.5), in the area of Human Performance, for failing to implement a process of planning, controlling, and executing work activities such that nuclear safety is an overriding priority. (Section 1R01.1)

Inspection Report# : [2014005](#) (pdf)

Significance:  Sep 30, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Identify Degraded Water Sprinkler System

The inspectors identified a finding of very low safety significance and associated NCV of license condition 4.F for the licensee's failure to identify a degraded water sprinkler system in the service water pump room and implement hourly fire watch inspections. Specifically, the licensee installed scaffolding in the service water pump room that interfered with the operation of the water sprinkler system and failed to implement hourly fire watch inspections as a compensatory measure. The licensee began fire watch inspections and credited installed fire hoses in the area for backup suppression until the planking could be removed from the scaffolding.

The finding was determined to be more than minor because the failure to identify the degraded sprinkler system and implement compensatory fire watch inspections was associated with the Mitigating Systems cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). In accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding degraded fire protection defense-in-depth strategies, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors screened the issue to Green under the Phase 1 Screening Question 1.3.1-A, because the inspectors determined that the impact of a fire would be limited to one train/division of service water pumps and a credited safe shutdown path would be unaffected. This finding has a cross-cutting aspect of Procedure Adherence (H.8), in the area of human performance, because the licensee did not follow processes, procedures, and work instructions.

Inspection Report# : [2014004](#) (pdf)

Significance:  Sep 30, 2014

Identified By: NRC

Item Type: FIN Finding

Incomplete Prompt Operability Determination of Non-Seismic Block Wall

The inspectors identified a finding of very low safety significance due to the licensee's failure to follow procedure EN AA 203 1001, "Operability Determinations/Functionality Assessments." Specifically, when the licensee identified that the north non-vital switchgear (NVSGR) block wall was found to be non-seismic and potentially susceptible to collapsing and blocking the flood relief dampers, they failed to evaluate all potential water sources that could spray or flood the NVSGR and cascade into the vital switchgear room below. Following questions by the inspectors, the licensee evaluated the additional water sources; isolated two additional fire protection hose reels on the south side of the NVSGR; and updated the prompt operability determination (POD).

The finding was determined to be more than minor because the failure to evaluate and disposition each potential flood source in the POD was associated with the Mitigating Systems cornerstone attribute of Protection Against External Events (Seismic) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage).

The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 4, "External Events Screening Questions," dated June 19, 2012. The inspectors answered "yes" to question 1 of External Events screening questions since the finding could potentially degrade one train of the emergency power system. The inspectors consulted the regional SRA, who completed a detailed risk evaluation, and determined that the finding was of very low safety-significance. This finding has a cross-cutting aspect of Identification (P.1), in the area of problem identification and resolution, for failing to identify issues completely, accurately, and in a timely manner in accordance with the program.

Inspection Report# : [2014004](#) (*pdf*)

Significance:  Jun 30, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Maintain Control of Loose Material in Containment

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the failure to follow procedures. Specifically, while Unit 2 was in Mode 3, the licensee left buoyant items in containment that were neither anchored or tethered to a substantial structure nor located in an anchored storage box or receptacle, as required by NP 7.2.28, "Containment Debris Control Program," Revision 5, Step 4.2.8(d)3. The licensee entered the issue into their corrective action program (CAP) and implemented short term corrective actions, which included removing the material from containment and communicating to station personnel the importance of not leaving susceptible material unattended in containment while in Modes 1 through 4. The licensee's long-term corrective actions included creating a site specific procedure that places all the containment debris control requirements in one central location. The inspectors determined that the finding was more than minor, because it was associated with the Equipment Performance attribute of the Mitigating Systems cornerstone. The finding adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At Power," Exhibit 2, Mitigating Systems Screening Questions, dated June 19, 2012. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross cutting aspect of Training (H.9), in the area of Human Performance, for failing to provide training and ensure knowledge transfer to maintain a knowledgeable workforce.

Inspection Report# : [2014003](#) (*pdf*)

Significance:  Jun 30, 2014

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Age Related Relay Failures Result in Inoperable Inverters

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was self-revealed for the failure to replace safety-related inverter components at the vendor prescribed 10 year frequency. Specifically, after concluding that safety-related inverter relays were required to be replaced at a 10-year frequency, per vendor direction, the licensee failed to promptly replace the remaining relays that were eighteen years old or evaluate if the relays could remain in service until the next scheduled 10 year inverter overhaul. The licensee entered the issue into their CAP and replaced the remaining K2 relays that were past their 10-year replacement frequency in April and June of 2014 and has plans to replace the remaining K1 relays, which provide alarm only function, in 2015.

The inspectors determined finding was more than minor because it was associated with the Equipment Performance attribute of the Mitigating System cornerstone and affected the cornerstone objective of ensuring the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the performance deficiency resulted in three additional K2 relay failures in 2013 and 2014, two of which occurred while the inverters were carry instrument bus loads and caused the inoperability of the associated inverters. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings." Because the finding impacted the Mitigating Systems Cornerstone, the inspectors screened the finding through IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," using Exhibit 2, "Mitigating Systems Screening Questions." The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross cutting aspect of Resolution (P.3), in the area of Problem Identification and Resolution because the licensee failed to take effective corrective actions to address issues in a timely manner commensurate with their safety significance.

Inspection Report# : [2014003](#) (pdf)

Significance:  Mar 31, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Measure Interpass Temperature

The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion IX, "Control of Special Processes," for a failure to measure the interpass temperature while performing welding on the auxiliary feedwater (AFW) piping system in accordance with welding procedure specifications (WPS) FP-PE-B31-P1P1-GTSM-001. Consequently, welding was performed without the Code and procedure required interpass temperature being monitored on a number of welds, a parameter which can affect the mechanical properties of the material being welded. To restore compliance, the welder proceeded to measure the interpass temperature and ensured that the temperature requirement would not have been exceeded. The licensee entered this issue into their CAP as AR 01950601.

The inspectors determined that this issue was more than minor in accordance with IMC 0612, Appendix B, "Issue Screening," dated September 7, 2012, because the inspectors answered "yes" to the More-than-Minor question, "If left uncorrected, would the performance deficiency have the potential to lead to a more significant safety concern". Specifically, absent NRC intervention, the welder would have completed all of the welds without having measured the interpass temperature, a welding parameter which can affect the mechanical properties (e.g., impact properties) of some materials being welded, and could lead to a potential failure of the weld in service. In accordance with Table 2, "Cornerstones Affected by Degraded Condition or Programmatic Weakness," of IMC 609, Attachment 4, "Initial Characterization of Findings," issued June 19, 2012, the inspectors checked the box under the Mitigating Systems Cornerstone because leakage at this AFW piping could degrade short term heat removal. The inspectors determined this finding was of very low safety significance (Green) based on answering "no" to the questions in Part A of Exhibit 1, "Mitigating Systems Screening Questions," in IMC 0609, Attachment A, "The Significance Determination Process for Findings At-Power," issued on June 19, 2012. Specifically, the inspectors answered, "yes" to the screening question "If the finding is a deficiency affecting the design or qualification of a mitigating structures systems component (SSC), does the SSC maintain its operability or functionality". The welder subsequently performed interpass temperature measurements and demonstrated that the temperature would remain below the required temperature of the welds in question, and the issue did not result in the actual loss of the operability or functionality of a safety system.

The inspectors determined that the primary cause of the failure to measure the interpass temperature in accordance with WPS FP-PE-B31-P1P1-GTSM-001 was related to the cross-cutting component of Problem Identification and Resolution, P.4 "Trending". The organization failed to periodically analyze information from the corrective action program and other assessments in the aggregate to identify programmatic and common cause issues. Point Beach had experienced a number of issues related to welding in the weeks before the interpass temperature issue, leading to some 19 welding-related action request (ARs) being written. The total of these issues presented the site with the opportunity

to evaluate if there were problems with the conduct of the welding program. Resulting increased focus could have led to licensee identification of, or prevention of, the lack of taking temperatures.

Inspection Report# : [2014002](#) (*pdf*)

Significance: G Mar 31, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Perform Flood Reviews of Material That Could Affect Flood Relief Paths

The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to follow procedures. Specifically, the licensee failed to perform a flood review, as required by NP 8.4.17, "PBNP Flooding Barrier / Relief Path Program," Revision 15, when work activities in the G-02 EDG room left a lightweight wet floor safety sign that could have been transported during a license basis internal flood event and affected the flow capacity of the flood relief slots. The licensee's short-term corrective actions included removing the material from the G-02 EDG room and communicating to station personnel the importance of not leaving susceptible material unattended. The licensee entered this issue into their CAP as AR 01960472.

The inspectors determined that the finding was more than minor, because, if left uncorrected, it could have the potential to become a more significant safety concern. Specifically, if the licensee was not performing flood reviews for material left unattended during or after work activities, susceptible unattended material could be transported to credited flood relief dampers and impeded the design flow rate required for the dampers to protect safety related equipment. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 4, "External Events Screening Questions," dated June 19, 2012. The inspectors answered "yes" to question 1 of External Events screening questions since the finding could potentially degrade one train of the emergency power system (a risk-significant system). Thus the inspectors consulted the regional Senior Risk Analyst (SRA).

The SRA performed a detailed risk evaluation using the Point Beach Standardized Plant Analysis Risk Model Version 8.22. For there to be a risk increase due to this deficiency there would have to be a LOOP coincident with a flood event that renders the G-02 EDG unavailable. The SRA performed a bounding analysis assuming that the flood event occurred coincident with a LOOP. The exposure time for the deficient condition was not more than 15-days.

Assuming a 15-day exposure time, the delta CDF was 9.3E-08/yr. The dominant sequence involved a transient initiating event with a consequential LOOP and station blackout. Based on the result of the detailed risk evaluation, the issue was of very low risk significance.

This finding has a cross-cutting aspect of Training (H.9) in the area of human performance, for failing to provide training and ensure knowledge transfer to maintain a knowledgeable workforce. Specifically, the licensee did not ensure that personnel were knowledgeable of need to control material that could transport during an internal flooding event, restrict flood relief paths, and affect flood mitigation features.

Inspection Report# : [2014002](#) (*pdf*)

Significance: G Mar 06, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Take Corrective Actions to Address External Flooding Procedure Deficiencies

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," in that from March 13, 2013 until February 14, 2014, the licensee failed to assure that for a significant condition adverse to quality (SQAC), the cause of the condition was determined and corrective actions were taken to preclude repetition. Specifically, the licensee's corrective actions failed to preclude repetition of an SQAC where Procedure PC 80 Part 7, "Lake Water Level Determination," as implemented, would not protect safety-related equipment in the turbine building or Circulating Water Pump House (CWPH). After the licensee had taken corrective actions to improve the wave barrier procedure in response to an

NRC-identified NOV, PC 80 Part 7 and other flood protection implementing procedures specified inadequate timelines to ensure wave run-up flood barriers would be installed prior to the lake level at which wave run-up could impact the site. Corrective actions for this issue included changing the affected procedures to install the wave barriers at a lower lake level, changing the lake level determination surveillance from monthly to weekly, and reducing the allowed installation time for the barriers from 3 weeks to 1 week.

The performance deficiency was screened against the Reactor Oversight Process per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Procedure Quality, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee's failure to correct procedural deficiencies associated with flood barrier construction timelines, could challenge the timely installation of the barriers, which could impact the ability of mitigating systems to respond during an external flooding event. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A. Based on a review of Appendix A, Exhibit 2, Item 4.B, the inspectors determined that this issue screened as having very low safety significance (Green).

This finding has a cross-cutting aspect in the area of problem identification and resolution, because the licensee failed to thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance. (P.2)

Inspection Report# : [2014007](#) (pdf)

Significance:  Mar 06, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Maintain External Flooding Procedure to Address All Possible CLB Floods

The inspectors identified a finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," in that from January 19, 1996 until November 25, 2013, the licensee failed to ensure that activities affecting quality were prescribed by documented procedures of a type appropriate to the circumstances to address external flooding as described in the Final Safety Analysis Report (FSAR). Specifically, PC 80 Part 7, "Lake Water Level Determination" directed advanced installation of concrete barriers to protect against deep wave action from the lake, which introduced significant unrecognized blockages in the natural drainage path credited in the FSAR to protect against the probable maximum precipitation and Turbine Building internal flooding events. Corrective actions for this issue included changing the procedure and FSAR to include actions to provide an additional flood relief path through the CWPH building and reliance on internal flood relief dampers for the affected flooding events.

The performance deficiency was screened against the Reactor Oversight Process per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Procedure Quality, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee's failure to procedurally control external flooding design features to ensure they would not adversely affect the strategy for other flooding events, could negatively impact mitigating systems' ability to respond during external and internal flooding events. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A, and determined a detailed risk evaluation was required. Following a detailed risk evaluation, Region III SRAs determined that the finding had very low safety significance (Green). This finding has a cross-cutting aspect in the area of problem identification and resolution, because the licensee failed to take effective corrective actions to address issues in a timely manner commensurate with their safety significance. (P.3)

Inspection Report# : [2014007](#) (pdf)

Significance: G Mar 06, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Perform a Required 10 CFR Part 50.59 Evaluation

The inspectors identified a finding of very low safety significance and associated Severity Level IV, non-cited violation of 10 CFR 50.59(d)(1), “Changes, tests and experiments,” when, on November 25, 2013, the licensee failed to perform an evaluation against the criteria in 10 CFR 50.59(c)(2) for a change to procedure PC 80 Part 7 to include actions to maintain functionality of drainage paths during probable maximum precipitation and turbine building flooding events. Specifically, PC 80 Part 7, “Lake Water Level Determination” was changed to include actions to open the CWPH rollup doors to provide an additional drainage path while wave barriers were in place, without fully evaluating the viability of reliance on additional flood features not credited for external flooding in the Current License Basis (CLB). Corrective actions for this issue included to updating the FSAR to describe the new flood paths, performing a 10 CFR 50.59 screening and 10 CFR 50.59 evaluation for the new drainage path which had put the site outside of the CLB, revising a related functionality assessment, controlling external flooding areas to ensure they are clear of debris, and creating a procedure to install curtains on the CWPH rollup doors during periods when they were required to be open.

The inspectors determined that the licensee’s failure to fully evaluate the viability of newly created flooding drainage paths as required by 10 CFR 50.59(d)(1) was a performance deficiency. The inspectors evaluated the performance deficiency using traditional enforcement in conjunction with the SDP because the performance deficiency had the potential to impact the regulatory process. The performance deficiency was screened per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Design Control, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee did not fully demonstrate that the availability, reliability, and capability of mitigating systems would be maintained during flooding events due to the site’s failure to evaluate the viability of alternate flood drainage paths through the CWPH. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A. Based on a review of Appendix A, Exhibit 2, Item 4.B, the inspectors determined that this issue screened as having very low safety significance (Green). Additionally, in accordance with

Section 6.1.d.2 of the NRC Enforcement Policy, this violation is categorized as a Severity Level IV because the resulting conditions were evaluated as having very low safety significance (Green) by the SDP. This finding has a cross-cutting aspect in the area of problem identification and resolution, because the licensee failed to thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance. (P.2)

Inspection Report# : [2014007](#) (*pdf*)

Significance: G Mar 06, 2014

Identified By: NRC

Item Type: FIN Finding

Failure to Perform a Required 10 CFR Part 50.59 Evaluation

The inspectors identified a finding of very low safety significance and associated Severity Level IV, non-cited violation of 10 CFR 50.59(d)(1), “Changes, tests and experiments,” when, on November 25, 2013, the licensee failed to perform an evaluation against the criteria in 10 CFR 50.59(c)(2) for a change to procedure PC 80 Part 7 to include actions to maintain functionality of drainage paths during probable maximum precipitation and turbine building flooding events. Specifically, PC 80 Part 7, “Lake Water Level Determination” was changed to include actions to open the CWPH rollup doors to provide an additional drainage path while wave barriers were in place, without fully evaluating the viability of

reliance on additional flood features not credited for external flooding in the Current License Basis (CLB). Corrective actions for this issue included to updating the FSAR to describe the new flood paths, performing a 10 CFR 50.59 screening and 10 CFR 50.59 evaluation for the new drainage path which had put the site outside of the CLB, revising a related functionality assessment, controlling external flooding areas to ensure they are clear of debris, and creating a procedure to install curtains on the CWPB rollup doors during periods when they were required to be open.

The inspectors determined that the licensee's failure to fully evaluate the viability of newly created flooding drainage paths as required by 10 CFR 50.59(d)(1) was a performance deficiency. The inspectors evaluated the performance deficiency using traditional enforcement in conjunction with the SDP because the performance deficiency had the potential to impact the regulatory process. The performance deficiency was screened per the guidance of IMC 0612, Appendix B, and determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors (Flood Hazard) and Design Control, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). Specifically, the licensee did not fully demonstrate that the availability, reliability, and capability of mitigating systems would be maintained during flooding events due to the site's failure to evaluate the viability of alternate flood drainage paths through the CWPB. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, Tables 2 and 3, and Appendix A. Based on a review of Appendix A, Exhibit 2, Item 4.B, the inspectors determined that this issue screened as having very low safety significance (Green). Additionally, in accordance with

Section 6.1.d.2 of the NRC Enforcement Policy, this violation is categorized as a Severity Level IV because the resulting conditions were evaluated as having very low safety significance (Green) by the SDP.

Inspection Report# : [2014007](#) (pdf)

Significance:  Mar 06, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Establish EFR Attributes to Assess the Effectiveness of Corrective Actions

The inspectors identified a finding of very low safety significance (Green) and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to ensure the effectiveness review attributes for a significant condition adverse to quality would ensure the corrective actions would eliminate or reduce the recurrence rate.

The inspectors determined that the licensee's failure to establish effectiveness review criteria that would have identified whether the corrective action to prevent recurrence (CAPRs) had effectively resolved the conditions was a performance deficiency warranting further review. The inspectors determined that this finding was more than minor in accordance with IMC 0612, Appendix B, because it was affected the Mitigating Systems Cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. If left uncorrected, would the performance deficiency have the potential to lead to a more significant safety concern? The inspectors evaluated the finding using IMC 0609, Appendix A. The inspectors determined the finding was of very low safety significance (Green) because the finding was not a deficiency affecting the design or qualification of a mitigating structure, system or component and did not result in a loss of operability or functionality. In addition, the finding did not represent a loss of system or function, did not represent an actual loss of function of a least a single train for longer than its technical specification allowed outage time, and did not represent an actual loss of function of one or more nontechnical specification trains of equipment designated as high safety-significance. The finding had a cross cutting aspect in the area of problem identification and resolution, specifically resolution, because licensee personnel failed to ensure the corrective actions to prevent recurrence had effective attributes. (P.2)
Inspection Report# : [2014007](#) (pdf)

Barrier Integrity

Significance:  Sep 30, 2014

Identified By: NRC

Item Type: FIN Finding

Deficiencies in Calculation Performed to Support Containment Dome Truss Operability

The inspectors identified a finding of very low safety significance for deficiencies in licensee's calculation performed to support operability of the unit 1 containment building dome truss and the safety related components supported from the truss. The licensee reassessed the dome truss members and connections that were found to be highly stressed and concluded that the components remained within the acceptable limits. The licensee initiated AR 01986069 to capture the concern identified by the inspectors and revised the POD.

The finding was determined to be more than minor because the finding is associated with the RCS Equipment and Barrier Performance Attribute of the Barrier Integrity cornerstone and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. Specifically, failure of the dome truss could impact the reliability/availability of the containment spray system to maintain operability of the containment. Additionally, More than Minor Example 3.j of IMC 0612, Appendix E, "Examples of Minor Issues," was used to inform the answer to this more than minor screening question. Specifically, the licensee's failure to address torsional effects and use of non conservative allowable stress values for evaluation of containment dome truss components, at the time of discovery, resulted in reasonable doubt of the operability of the subject walls. In accordance with IMC 0609, "Significance Determination Process," Attachment 4, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Barrier Integrity cornerstone. As a result, the inspectors determined the finding could be evaluated using IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 3. Because the finding did not represent an actual failure of a component required to maintain containment integrity, the inspectors answered "no" to Screening Questions 1 and 2 for the Reactor Containment section, and determined the finding was of very low safety significance. This finding has a cross cutting aspect of Conservative Bias (H.14) in the area of human performance for the licensee's failure to use conservative decision making practices in the operability evaluation of the containment dome truss.

Inspection Report# : [2014004](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission

has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : April 01, 2015

Point Beach 2

1Q/2015 Plant Inspection Findings

Initiating Events

Significance:  Sep 30, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Perform Required Fire Watch Inspections

The inspectors identified a finding of very low safety significance and associated NCV of license condition 4.F for the failure to conduct required fire watch inspections. Specifically, the licensee failed to inspect multiple fire zones at the correct frequency and to identify work activities that could introduce potential ignition sources, combustible materials, and other abnormal activities that could introduce an increased likelihood of a fire starting in the fire zone. The licensee implemented short term corrective actions, which included issuing guidance to personnel that prescribed a specific route and general timeframe for performing fire watch inspections, as well as, requiring the fire watches to initial for each individual fire zone for each inspection.

The finding was determined to be more than minor because the failure to conduct the required fire watch inspections was associated with the Initiating Events cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). The inspectors evaluated the finding in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Screening and Characterization of Findings," Table 3, "SDP Appendix Router." In Question 2 of Section E, "Fire Protection," the inspectors answered "yes" to the screening question "Does the finding involve: 1) A failure to adequately implement fire prevention and administrative controls for transient combustible materials, transient ignition sources, or hot work activities?" Therefore, a detailed risk evaluation was performed by the Senior Reactor Analysts (SRAs) using IMC 0609, Appendix F, "Fire Protection Significance Determination Process," and the licensee's preliminary NFPA-805 analyses as described in Section 1R05.1. Based on the detailed risk evaluation, the SRAs determined that the finding was of very low safety significance. This finding has a cross-cutting aspect of Avoid Complacency (H.12), in the area of human performance, for failing implement appropriate error reduction tools.

Inspection Report# : [2014004](#) (*pdf*)

Mitigating Systems

Significance:  Mar 31, 2015

Identified By: NRC

Item Type: FIN Finding

Failure to Process Vendor Technical Information

A finding of very low safety significance was identified by the inspectors for the failure to follow site procedure NP 7.2.13, "Processing of Vendor Technical Information." Specifically, the licensee failed to process a vendor technical bulletin in accordance with NP 7.2.13. Procedure NP 7.2.13 required that relevant vendor correspondence received by the licensee be analyzed to identify specific actions needed to operate and maintain the plant safely.

The inspectors assessed licensee apparent cause evaluation (ACE) 1983930, “D-107 Current Limit Was Out of Range,” related to multiple D-107 battery charger failures. The inspectors’ review determined that the licensee’s ACE identified a technical bulletin (TB) that provided relevant information related to the inspection, adjustment, and replacement of an electrical connector located in some of the licensee’s safety-related battery chargers. The technical bulletin, TB-143001-00, “PCP edge card connector and terminals,” was dated March 2004 with a revision published in March 2005. The licensee’s ACE concluded that the vendor information was not incorporated into licensee procedures but failed to discuss why the vendor information had not been incorporated. The inspectors continued their assessment to determine why the information was not appropriately incorporated into licensee procedures and maintenance processes at the time the technical information was distributed. The inspectors reviewed procedure NP 7.2.13, which was in effect during the timeframe that TB-143001-00 and its revision were published, and found that it prescribed a process to assess vendor technical information to determine which licensee documents and drawings needed to be updated. The inspectors determined based on interviews with engineering personnel that the licensee did receive the technical bulletin around the general time of its publication; however, due to an oversight, NP 7.2.13 was not followed and the information was not submitted for review and processing.

The inspectors also reviewed the licensee’s handling of the same technical bulletin during the completion of the ACE 1983930 in 2014 and found that the licensee did initiate a corrective action to incorporate the technical bulletin information into the licensee’s routine maintenance procedures (RMPs), but again did not follow the process prescribed in the licensee’s current procedure EN-AA-204-1107, “Processing Vendor Documents.” Procedure EN-AA-204-1107 replaced procedure NP 7.2.13 in early 2014 and contained a similar comprehensive assessment of the vendor documents, including updating the equipment database with the vendor document number.

This finding is closed to IR 2015-001.

Inspection Report# : [2015001](#) (*pdf*)

Significance:  Mar 27, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Promptly Correct Conditions Adverse to Quality Regarding Electrical Power Cable Sizing and Protection (Section 1R21.3.b.(1))

Green. The inspectors identified a finding of very-low safety significance, and an associated Non-Cited Violation of Title 10, Code of Federal Regulations (CFR) Part 50, Appendix B, Criterion XVI, “Corrective Action,” for the licensee’s failure to implement timely corrective actions to address the longstanding issue of electrical power cables that have not been verified to be sized or protected in accordance with their design bases, as described in PBNP’s Final Safety Analysis Report Section 8.0.1. Specifically, the licensee failed to correct known deficiencies regarding: (1) power cables with operating currents in excess of their current-carrying capacities; (2) power cables that are not protected against overload in accordance with the National Electrical Code; and (3) power cables for which their current-carrying capacities are undetermined. Although various corrective action documents have been initiated since these issues first came to light in the 1990 to 1991 time period, the licensee has not taken appropriate actions to correct the conditions adverse to quality to this date. The licensee entered this finding into their Corrective Action Program as Condition Report (CR) 02035020 and CR 02035680, with recommended actions to perform ampacity analysis for applicable cables, verify cables are protected against overload in accordance with the National Electrical Code, verify cable ampacities are higher than their respective load currents, and perform an evaluation to determine why this issue has not been resolved and address the safety culture aspect.

The inspectors determined the licensee’s failure to promptly correct the conditions adverse to quality regarding electrical power cables was a performance deficiency warranting a significance determination. The performance deficiency was determined to be more than minor, and a finding in accordance with IMC 0612, “Power Reactor Inspection Reports,” Appendix B, “Issue Screening,” because it was associated with the Design Control attribute of the Reactor Safety, Mitigating Systems Cornerstone, and it adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable

consequences. The inspectors evaluated the finding in accordance with IMC 0609.04, Phase 1, “Initial Screening and Characterization of Findings.” The finding screened as having very-low safety significance (Green) because it was a design or qualification deficiency that did not represent a loss of operability or functionality; did not represent an actual loss of safety function on the system or train; did not result in the loss of one or more trains of non-technical specification equipment; and did not screen as potentially risk significant due to seismic, flooding, or severe weather. The inspectors identified a crosscutting aspect associated with this finding in the area of Human Performance, associated with the Design Margin component, because the licensee failed to ensure equipment is operated within design margins, and margins are carefully guarded and changed only through a systematic and rigorous process. [H.6] (Section 1R21.3.b (1))

Inspection Report# : [2015008](#) (*pdf*)

Significance:  Dec 31, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Promptly Correct a Failed Emergency Diesel Generator Day Tank Room Heater (Section 1R01.1)

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion XVI, “Corrective Action,” was identified by the inspectors for the failure to promptly repair the non-functional HX-272A, a safety-related room heater for the G-04 Emergency Diesel Generator (EDG) day tank room. Specifically, HX-272A was identified failed in June 2012 and was not corrected until November 2014 but not before inspectors identified that the redundant room heater, HX-272B, had also failed and the room temperature had dropped below the design basis temperature of 50 degrees Fahrenheit. The licensee repaired HX 272A on November 25, 2014 and also installed a thermometer in the fuel oil day tank room for operators to monitor room temperature. The licensee entered the issue into their CAP as action request (AR) 02018260 and AR 02008296.

The inspectors determined that failing to promptly repair safety-related room heater, HX-272A, G-04 EDG day tank room heater was contrary to 10 CFR 50 Appendix B, Criterion XVI and was a performance deficiency. The inspectors determined that the finding was more than minor, because, if left uncorrected, it could have the potential to become a more significant safety concern. Specifically, the inspectors found both safety-related heaters non-functional in the fuel oil day tank room with outside air blowing into the room through a ventilation damper. The outside temperature was approximately 17 degrees Fahrenheit, and while the licensee determined that at the time their fuel oil cloud point was approximately zero degrees Fahrenheit, the licensee’s specification for fuel oil cloud point allowed for a fuel oil cloud point of up to 25 degrees Fahrenheit. Additionally, if the fuel oil day tank room temperatures dropped below freezing, the fire sprinkler piping within the room could have actuated and/or ruptured and adversely affected the safety-related fuel oil transfer pumps within the room. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Initial Characterization of Findings,” dated June 19, 2012, and Appendix A, “The Significance Determination Process for Findings At Power,” Exhibit 2, Mitigating Systems Screening Questions, dated June 19, 2012.

The inspectors concluded that the finding was of very low safety significance because the inspectors answered “No” to the Mitigating Systems screening questions. This finding has a cross cutting aspect of Work Management (H.5), in the area of Human Performance, for failing to implement a process of planning, controlling, and executing work activities such that nuclear safety is an overriding priority. (Section 1R01.1)

Inspection Report# : [2014005](#) (*pdf*)

Significance:  Sep 30, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Identify Degraded Water Sprinkler System

The inspectors identified a finding of very low safety significance and associated NCV of license condition 4.F for the

licensee's failure to identify a degraded water sprinkler system in the service water pump room and implement hourly fire watch inspections. Specifically, the licensee installed scaffolding in the service water pump room that interfered with the operation of the water sprinkler system and failed to implement hourly fire watch inspections as a compensatory measure. The licensee began fire watch inspections and credited installed fire hoses in the area for backup suppression until the planking could be removed from the scaffolding.

The finding was determined to be more than minor because the failure to identify the degraded sprinkler system and implement compensatory fire watch inspections was associated with the Mitigating Systems cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). In accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding degraded fire protection defense-in-depth strategies, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors screened the issue to Green under the Phase 1 Screening Question 1.3.1-A, because the inspectors determined that the impact of a fire would be limited to one train/division of service water pumps and a credited safe shutdown path would be unaffected. This finding has a cross-cutting aspect of Procedure Adherence (H.8), in the area of human performance, because the licensee did not follow processes, procedures, and work instructions.

Inspection Report# : [2014004](#) (*pdf*)

Significance:  Sep 30, 2014

Identified By: NRC

Item Type: FIN Finding

Incomplete Prompt Operability Determination of Non-Seismic Block Wall

The inspectors identified a finding of very low safety significance due to the licensee's failure to follow procedure EN AA 203 1001, "Operability Determinations/Functionality Assessments." Specifically, when the licensee identified that the north non-vital switchgear (NVSGR) block wall was found to be non-seismic and potentially susceptible to collapsing and blocking the flood relief dampers, they failed to evaluate all potential water sources that could spray or flood the NVSGR and cascade into the vital switchgear room below. Following questions by the inspectors, the licensee evaluated the additional water sources; isolated two additional fire protection hose reels on the south side of the NVSGR; and updated the prompt operability determination (POD).

The finding was determined to be more than minor because the failure to evaluate and disposition each potential flood source in the POD was associated with the Mitigating Systems cornerstone attribute of Protection Against External Events (Seismic) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage).

The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 4, "External Events Screening Questions," dated June 19, 2012. The inspectors answered "yes" to question 1 of External Events screening questions since the finding could potentially degrade one train of the emergency power system. The inspectors consulted the regional SRA, who completed a detailed risk evaluation, and determined that the finding was of very low safety-significance. This finding has a cross-cutting aspect of Identification (P.1), in the area of problem identification and resolution, for failing to identify issues completely, accurately, and in a timely manner in accordance with the program.

Inspection Report# : [2014004](#) (*pdf*)

Significance:  Jun 30, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Maintain Control of Loose Material in Containment

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the failure to follow procedures. Specifically, while Unit 2 was in Mode 3, the licensee left buoyant items in containment that were neither anchored or tethered to a substantial structure nor located in an anchored storage box or receptacle, as required by NP 7.2.28, "Containment Debris Control Program," Revision 5, Step 4.2.8(d)3. The licensee entered the issue into their corrective action program (CAP) and implemented short term corrective actions, which included removing the material from containment and communicating to station personnel the importance of not leaving susceptible material unattended in containment while in Modes 1 through 4. The licensee's long-term corrective actions included creating a site specific procedure that places all the containment debris control requirements in one central location. The inspectors determined that the finding was more than minor, because it was associated with the Equipment Performance attribute of the Mitigating Systems cornerstone. The finding adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At Power," Exhibit 2, Mitigating Systems Screening Questions, dated June 19, 2012. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross cutting aspect of Training (H.9), in the area of Human Performance, for failing to provide training and ensure knowledge transfer to maintain a knowledgeable workforce.

Inspection Report# : [2014003](#) (pdf)

Significance: G Jun 30, 2014

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Age Related Relay Failures Result in Inoperable Inverters

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was self-revealed for the failure to replace safety-related inverter components at the vendor prescribed 10 year frequency. Specifically, after concluding that safety-related inverter relays were required to be replaced at a 10-year frequency, per vendor direction, the licensee failed to promptly replace the remaining relays that were eighteen years old or evaluate if the relays could remain in service until the next scheduled 10 year inverter overhaul. The licensee entered the issue into their CAP and replaced the remaining K2 relays that were past their 10-year replacement frequency in April and June of 2014 and has plans to replace the remaining K1 relays, which provide alarm only function, in 2015.

The inspectors determined finding was more than minor because it was associated with the Equipment Performance attribute of the Mitigating System cornerstone and affected the cornerstone objective of ensuring the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the performance deficiency resulted in three additional K2 relay failures in 2013 and 2014, two of which occurred while the inverters were carry instrument bus loads and caused the inoperability of the associated inverters. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings." Because the finding impacted the Mitigating Systems Cornerstone, the inspectors screened the finding through IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," using Exhibit 2, "Mitigating Systems Screening Questions." The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross cutting aspect of Resolution (P.3), in the area of Problem Identification and Resolution because the licensee failed to take effective corrective actions to address issues in a timely manner commensurate with their safety significance.

Inspection Report# : [2014003](#) (pdf)

Barrier Integrity

Significance:  Sep 30, 2014

Identified By: NRC

Item Type: FIN Finding

Deficiencies in Calculation Performed to Support Containment Dome Truss Operability

The inspectors identified a finding of very low safety significance for deficiencies in licensee's calculation performed to support operability of the unit 1 containment building dome truss and the safety related components supported from the truss. The licensee reassessed the dome truss members and connections that were found to be highly stressed and concluded that the components remained within the acceptable limits. The licensee initiated AR 01986069 to capture the concern identified by the inspectors and revised the POD.

The finding was determined to be more than minor because the finding is associated with the RCS Equipment and Barrier Performance Attribute of the Barrier Integrity cornerstone and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. Specifically, failure of the dome truss could impact the reliability/availability of the containment spray system to maintain operability of the containment. Additionally, More than Minor Example 3.j of IMC 0612, Appendix E, "Examples of Minor Issues," was used to inform the answer to this more than minor screening question. Specifically, the licensee's failure to address torsional effects and use of non conservative allowable stress values for evaluation of containment dome truss components, at the time of discovery, resulted in reasonable doubt of the operability of the subject walls. In accordance with IMC 0609, "Significance Determination Process," Attachment 4, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Barrier Integrity cornerstone. As a result, the inspectors determined the finding could be evaluated using IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 3. Because the finding did not represent an actual failure of a component required to maintain containment integrity, the inspectors answered "no" to Screening Questions 1 and 2 for the Reactor Containment section, and determined the finding was of very low safety significance. This finding has a cross cutting aspect of Conservative Bias (H.14) in the area of human performance for the licensee's failure to use conservative decision making practices in the operability evaluation of the containment dome truss.

Inspection Report# : [2014004](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Significance:  Mar 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Quantify Radionuclides in the Body for Internal Dose Assessments

The inspectors identified a finding of very-low safety significance (Green), and an associated NCV of 10 CFR 20.1204 for the licensee's failure to take suitable measurements of quantities of radionuclides in the body for assessing internal dose for occupational exposure control.

Fleet procedure RP-AA-101, "Personnel Monitoring Program", requires that all radiation workers be monitored for radiation exposure. This includes the

analysis of internal radiation exposure by performing whole-body counts. The analysis of whole body counts and subsequent dose assessments are governed by site specific procedures, HPIP 1.74, "Operation of the Canberra Whole-Body Counter," and HPIP 1.57.1, "Evaluation of Whole-Body Count Results". The whole-body count is used to determine the amount of each radionuclide present in the body at the time the count was performed. Based on this information, dose calculations are performed to determine the dose to the individual due to these internally deposited radionuclides. Therefore, in order to perform correct dose calculations, it is important to determine which radionuclides are in the body and the quantity present of each of these radionuclides.

This NCV is closed to IR 2015-001.

Inspection Report# : [2015001](#) (*pdf*)

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : June 16, 2015

Point Beach 2

2Q/2015 Plant Inspection Findings

Initiating Events

Significance:  Sep 30, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Perform Required Fire Watch Inspections

The inspectors identified a finding of very low safety significance and associated NCV of license condition 4.F for the failure to conduct required fire watch inspections. Specifically, the licensee failed to inspect multiple fire zones at the correct frequency and to identify work activities that could introduce potential ignition sources, combustible materials, and other abnormal activities that could introduce an increased likelihood of a fire starting in the fire zone. The licensee implemented short term corrective actions, which included issuing guidance to personnel that prescribed a specific route and general timeframe for performing fire watch inspections, as well as, requiring the fire watches to initial for each individual fire zone for each inspection.

The finding was determined to be more than minor because the failure to conduct the required fire watch inspections was associated with the Initiating Events cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). The inspectors evaluated the finding in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Screening and Characterization of Findings," Table 3, "SDP Appendix Router." In Question 2 of Section E, "Fire Protection," the inspectors answered "yes" to the screening question "Does the finding involve: 1) A failure to adequately implement fire prevention and administrative controls for transient combustible materials, transient ignition sources, or hot work activities?" Therefore, a detailed risk evaluation was performed by the Senior Reactor Analysts (SRAs) using IMC 0609, Appendix F, "Fire Protection Significance Determination Process," and the licensee's preliminary NFPA-805 analyses as described in Section 1R05.1. Based on the detailed risk evaluation, the SRAs determined that the finding was of very low safety significance. This finding has a cross-cutting aspect of Avoid Complacency (H.12), in the area of human performance, for failing implement appropriate error reduction tools.

Inspection Report# : [2014004](#) (*pdf*)

Mitigating Systems

Significance:  Mar 31, 2015

Identified By: NRC

Item Type: FIN Finding

Failure to Process Vendor Technical Information

A finding of very low safety significance was identified by the inspectors for the failure to follow site procedure NP 7.2.13, "Processing of Vendor Technical Information." Specifically, the licensee failed to process a vendor technical bulletin in accordance with NP 7.2.13. Procedure NP 7.2.13 required that relevant vendor correspondence received by the licensee be analyzed to identify specific actions needed to operate and maintain the plant safely.

The inspectors assessed licensee apparent cause evaluation (ACE) 1983930, “D-107 Current Limit Was Out of Range,” related to multiple D-107 battery charger failures. The inspectors’ review determined that the licensee’s ACE identified a technical bulletin (TB) that provided relevant information related to the inspection, adjustment, and replacement of an electrical connector located in some of the licensee’s safety-related battery chargers. The technical bulletin, TB-143001-00, “PCP edge card connector and terminals,” was dated March 2004 with a revision published in March 2005. The licensee’s ACE concluded that the vendor information was not incorporated into licensee procedures but failed to discuss why the vendor information had not been incorporated. The inspectors continued their assessment to determine why the information was not appropriately incorporated into licensee procedures and maintenance processes at the time the technical information was distributed. The inspectors reviewed procedure NP 7.2.13, which was in effect during the timeframe that TB-143001-00 and its revision were published, and found that it prescribed a process to assess vendor technical information to determine which licensee documents and drawings needed to be updated. The inspectors determined based on interviews with engineering personnel that the licensee did receive the technical bulletin around the general time of its publication; however, due to an oversight, NP 7.2.13 was not followed and the information was not submitted for review and processing.

The inspectors also reviewed the licensee’s handling of the same technical bulletin during the completion of the ACE 1983930 in 2014 and found that the licensee did initiate a corrective action to incorporate the technical bulletin information into the licensee’s routine maintenance procedures (RMPs), but again did not follow the process prescribed in the licensee’s current procedure EN-AA-204-1107, “Processing Vendor Documents.” Procedure EN-AA-204-1107 replaced procedure NP 7.2.13 in early 2014 and contained a similar comprehensive assessment of the vendor documents, including updating the equipment database with the vendor document number.

This finding is closed to IR 2015-001.

Inspection Report# : [2015001](#) (*pdf*)

Significance:  Mar 27, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Promptly Correct Conditions Adverse to Quality Regarding Electrical Power Cable Sizing and Protection (Section 1R21.3.b.(1))

Green. The inspectors identified a finding of very-low safety significance, and an associated Non-Cited Violation of Title 10, Code of Federal Regulations (CFR) Part 50, Appendix B, Criterion XVI, “Corrective Action,” for the licensee’s failure to implement timely corrective actions to address the longstanding issue of electrical power cables that have not been verified to be sized or protected in accordance with their design bases, as described in PBNP’s Final Safety Analysis Report Section 8.0.1. Specifically, the licensee failed to correct known deficiencies regarding: (1) power cables with operating currents in excess of their current-carrying capacities; (2) power cables that are not protected against overload in accordance with the National Electrical Code; and (3) power cables for which their current-carrying capacities are undetermined. Although various corrective action documents have been initiated since these issues first came to light in the 1990 to 1991 time period, the licensee has not taken appropriate actions to correct the conditions adverse to quality to this date. The licensee entered this finding into their Corrective Action Program as Condition Report (CR) 02035020 and CR 02035680, with recommended actions to perform ampacity analysis for applicable cables, verify cables are protected against overload in accordance with the National Electrical Code, verify cable ampacities are higher than their respective load currents, and perform an evaluation to determine why this issue has not been resolved and address the safety culture aspect.

The inspectors determined the licensee’s failure to promptly correct the conditions adverse to quality regarding electrical power cables was a performance deficiency warranting a significance determination. The performance deficiency was determined to be more than minor, and a finding in accordance with IMC 0612, “Power Reactor Inspection Reports,” Appendix B, “Issue Screening,” because it was associated with the Design Control attribute of the Reactor Safety, Mitigating Systems Cornerstone, and it adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable

consequences. The inspectors evaluated the finding in accordance with IMC 0609.04, Phase 1, “Initial Screening and Characterization of Findings.” The finding screened as having very-low safety significance (Green) because it was a design or qualification deficiency that did not represent a loss of operability or functionality; did not represent an actual loss of safety function on the system or train; did not result in the loss of one or more trains of non-technical specification equipment; and did not screen as potentially risk significant due to seismic, flooding, or severe weather. The inspectors identified a crosscutting aspect associated with this finding in the area of Human Performance, associated with the Design Margin component, because the licensee failed to ensure equipment is operated within design margins, and margins are carefully guarded and changed only through a systematic and rigorous process. [H.6] (Section 1R21.3.b (1))

Inspection Report# : [2015008](#) (*pdf*)

Significance:  Dec 31, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Promptly Correct a Failed Emergency Diesel Generator Day Tank Room Heater (Section 1R01.1)

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion XVI, “Corrective Action,” was identified by the inspectors for the failure to promptly repair the non-functional HX-272A, a safety-related room heater for the G-04 Emergency Diesel Generator (EDG) day tank room. Specifically, HX-272A was identified failed in June 2012 and was not corrected until November 2014 but not before inspectors identified that the redundant room heater, HX-272B, had also failed and the room temperature had dropped below the design basis temperature of 50 degrees Fahrenheit. The licensee repaired HX 272A on November 25, 2014 and also installed a thermometer in the fuel oil day tank room for operators to monitor room temperature. The licensee entered the issue into their CAP as action request (AR) 02018260 and AR 02008296.

The inspectors determined that failing to promptly repair safety-related room heater, HX-272A, G-04 EDG day tank room heater was contrary to 10 CFR 50 Appendix B, Criterion XVI and was a performance deficiency. The inspectors determined that the finding was more than minor, because, if left uncorrected, it could have the potential to become a more significant safety concern. Specifically, the inspectors found both safety-related heaters non-functional in the fuel oil day tank room with outside air blowing into the room through a ventilation damper. The outside temperature was approximately 17 degrees Fahrenheit, and while the licensee determined that at the time their fuel oil cloud point was approximately zero degrees Fahrenheit, the licensee’s specification for fuel oil cloud point allowed for a fuel oil cloud point of up to 25 degrees Fahrenheit. Additionally, if the fuel oil day tank room temperatures dropped below freezing, the fire sprinkler piping within the room could have actuated and/or ruptured and adversely affected the safety-related fuel oil transfer pumps within the room. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Initial Characterization of Findings,” dated June 19, 2012, and Appendix A, “The Significance Determination Process for Findings At Power,” Exhibit 2, Mitigating Systems Screening Questions, dated June 19, 2012.

The inspectors concluded that the finding was of very low safety significance because the inspectors answered “No” to the Mitigating Systems screening questions. This finding has a cross cutting aspect of Work Management (H.5), in the area of Human Performance, for failing to implement a process of planning, controlling, and executing work activities such that nuclear safety is an overriding priority. (Section 1R01.1)

Inspection Report# : [2014005](#) (*pdf*)

Significance:  Sep 30, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Identify Degraded Water Sprinkler System

The inspectors identified a finding of very low safety significance and associated NCV of license condition 4.F for the

licensee's failure to identify a degraded water sprinkler system in the service water pump room and implement hourly fire watch inspections. Specifically, the licensee installed scaffolding in the service water pump room that interfered with the operation of the water sprinkler system and failed to implement hourly fire watch inspections as a compensatory measure. The licensee began fire watch inspections and credited installed fire hoses in the area for backup suppression until the planking could be removed from the scaffolding.

The finding was determined to be more than minor because the failure to identify the degraded sprinkler system and implement compensatory fire watch inspections was associated with the Mitigating Systems cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). In accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding degraded fire protection defense-in-depth strategies, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors screened the issue to Green under the Phase 1 Screening Question 1.3.1-A, because the inspectors determined that the impact of a fire would be limited to one train/division of service water pumps and a credited safe shutdown path would be unaffected. This finding has a cross-cutting aspect of Procedure Adherence (H.8), in the area of human performance, because the licensee did not follow processes, procedures, and work instructions.

Inspection Report# : [2014004](#) (*pdf*)

Significance:  Sep 30, 2014

Identified By: NRC

Item Type: FIN Finding

Incomplete Prompt Operability Determination of Non-Seismic Block Wall

The inspectors identified a finding of very low safety significance due to the licensee's failure to follow procedure EN AA 203 1001, "Operability Determinations/Functionality Assessments." Specifically, when the licensee identified that the north non-vital switchgear (NVSGR) block wall was found to be non-seismic and potentially susceptible to collapsing and blocking the flood relief dampers, they failed to evaluate all potential water sources that could spray or flood the NVSGR and cascade into the vital switchgear room below. Following questions by the inspectors, the licensee evaluated the additional water sources; isolated two additional fire protection hose reels on the south side of the NVSGR; and updated the prompt operability determination (POD).

The finding was determined to be more than minor because the failure to evaluate and disposition each potential flood source in the POD was associated with the Mitigating Systems cornerstone attribute of Protection Against External Events (Seismic) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage).

The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 4, "External Events Screening Questions," dated June 19, 2012. The inspectors answered "yes" to question 1 of External Events screening questions since the finding could potentially degrade one train of the emergency power system. The inspectors consulted the regional SRA, who completed a detailed risk evaluation, and determined that the finding was of very low safety-significance. This finding has a cross-cutting aspect of Identification (P.1), in the area of problem identification and resolution, for failing to identify issues completely, accurately, and in a timely manner in accordance with the program.

Inspection Report# : [2014004](#) (*pdf*)

Barrier Integrity

Significance:  Sep 30, 2014

Identified By: NRC

Item Type: FIN Finding

Deficiencies in Calculation Performed to Support Containment Dome Truss Operability

The inspectors identified a finding of very low safety significance for deficiencies in licensee's calculation performed to support operability of the unit 1 containment building dome truss and the safety related components supported from the truss. The licensee reassessed the dome truss members and connections that were found to be highly stressed and concluded that the components remained within the acceptable limits. The licensee initiated AR 01986069 to capture the concern identified by the inspectors and revised the POD.

The finding was determined to be more than minor because the finding is associated with the RCS Equipment and Barrier Performance Attribute of the Barrier Integrity cornerstone and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. Specifically, failure of the dome truss could impact the reliability/availability of the containment spray system to maintain operability of the containment. Additionally, More than Minor Example 3.j of IMC 0612, Appendix E, "Examples of Minor Issues," was used to inform the answer to this more than minor screening question. Specifically, the licensee's failure to address torsional effects and use of non conservative allowable stress values for evaluation of containment dome truss components, at the time of discovery, resulted in reasonable doubt of the operability of the subject walls. In accordance with IMC 0609, "Significance Determination Process," Attachment 4, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Barrier Integrity cornerstone. As a result, the inspectors determined the finding could be evaluated using IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 3. Because the finding did not represent an actual failure of a component required to maintain containment integrity, the inspectors answered "no" to Screening Questions 1 and 2 for the Reactor Containment section, and determined the finding was of very low safety significance. This finding has a cross cutting aspect of Conservative Bias (H.14) in the area of human performance for the licensee's failure to use conservative decision making practices in the operability evaluation of the containment dome truss.

Inspection Report# : [2014004](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Significance:  Mar 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Quantify Radionuclides in the Body for Internal Dose Assessments

The inspectors identified a finding of very-low safety significance (Green), and an associated NCV of 10 CFR 20.1204 for the licensee's failure to take suitable measurements of quantities of radionuclides in the body for assessing internal dose for occupational exposure control.

Fleet procedure RP-AA-101, "Personnel Monitoring Program", requires that all radiation workers be monitored for radiation exposure. This includes the analysis of internal radiation exposure by performing whole-body counts. The analysis of whole body counts and subsequent dose assessments are governed by site specific procedures, HPIP 1.74, "Operation of the Canberra Whole-Body Counter," and HPIP 1.57.1, "Evaluation of Whole-Body Count Results". The whole-body count is used to

determine the amount of each radionuclide present in the body at the time the count was performed. Based on this information, dose calculations are performed to determine the dose to the individual due to these internally deposited radionuclides. Therefore, in order to perform correct dose calculations, it is important to determine which radionuclides are in the body and the quantity present of each of these radionuclides.

This NCV is closed to IR 2015-001.

Inspection Report# : [2015001](#) (*pdf*)

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : August 07, 2015

Point Beach 2

3Q/2015 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Sep 30, 2015

Identified By: NRC

Item Type: FIN Finding

Incomplete Functionality Assessment for Flooding in the Diesel Generator Building

The inspectors identified a finding of very low safety significance for the licensee's failure to follow procedure EN AA 203 1001, "Operability Determinations/Functionality Assessments," Revision 19. Specifically, when the licensee identified that internal flood sources in the diesel generator building (DGB) were larger than the drain capacity, they failed to identify all affected structures, systems, and components (SSCs). The DGB contains predominately Train B emergency power systems; however, the fuel oil transfer pumps for the Train A emergency diesel generators are located in the southeast corner of the building. The licensee failed to assess the effects of flooding on the Train A fuel oil transfer pumps. The licensee's corrective actions included the creation of an adverse condition monitoring plan, which implemented an hourly flood watch in the DGB when the fire pump was manually started.

The inspectors determined that the finding was more than minor, because if left uncorrected, it would potentially result in a more safety significant issue. Specifically, the failure to evaluate the effects of flooding on all SSCs resulted in inadequate compensatory measures. The inspectors determined the finding could be evaluated using the significance determination process (SDP) in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012. For the time period in question, May 17, 2015 to September 17, 2015, the inspectors reviewed the security door card reader reports and starting sump levels for the DGB and found that during times when the fire pumps were running, station personnel had toured the DGB at a frequency that would have identified flooding conditions before a loss of system function. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross-cutting aspect of Evaluation (P.2), in the area of Problem Identification and Resolution (PI&R), for failing to thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance.

Inspection Report# : [2015003](#) (*pdf*)

Significance:  Sep 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Potential Failure of Multiple Safety-Related Trains During Flooding Events

The inspectors identified a finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to ensure that a non Category I (seismic) component failure, that results in flooding, would not adversely affect safety related equipment needed to get the plant to safe

shutdown (SSD) or to limit the consequences of an accident. Specifically, the design of Point Beach did not ensure that the Residual Heat Removal (RHR) pumps would be protected from all credible non Category I (seismic) system failures. The licensee's corrective actions included an extensive internal flooding design review, which will result in an updated Final Safety Analysis Report (FSAR) with a more detailed description of the station's flooding licensing basis; modifications to multiple flood barriers to bring them into compliance with the licensee's flooding licensing basis; installation of additional flood level alarms where necessary, and evaluation or modification of service water (SW) piping to properly qualify it as seismic.

The inspectors determined that the finding was more than minor because it was associated with the Design Control attribute of the Mitigating System cornerstone and affected the cornerstone objective of ensuring the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the inadequate design resulted in an unanalyzed condition and loss of safety function of the RHR system while the plants were in Modes 4, 5, and 6, when relying on the RHR system for decay heat removal. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012. The inspectors answered "yes" to question 2 of the screening questions because the finding represented a loss of safety function. Thus the inspectors consulted the Region III Senior Risk Analysts (SRAs) who performed a detailed risk evaluation and determined that the finding was of very low safety significance (Green). The inspectors determined that the associated finding did not have a cross-cutting aspect because the finding was not reflective of current performance.

Inspection Report# : [2015003](#) (pdf)

Significance:  Sep 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Perform a Written Safety Evaluation for FSAR Changes

The inspectors identified a Severity Level IV NCV of 10 CFR 50.59(d)(1), "Changes, Tests, and Experiments," and an associated finding of very low safety significance for the licensee's failure to perform a safety evaluation to demonstrate that the removal of statements from the FSAR did not require a license amendment. Specifically, the licensee failed to perform a safety evaluation to determine whether removing an FSAR statement, which defined the RHR pump cubicle design flood height as seven feet, could be performed without a license amendment. The licensee entered the deficiency in their CAP as Action Request (AR) 02069425 by which the licensee intends on re-evaluating the 1996 FSAR change.

The inspectors determined that the finding was more than minor because the finding, if left uncorrected, would become a more significant safety concern. Specifically, inappropriately removing the information from the FSAR allowed the licensee to decrease the design basis flood protection height of the RHR compartments and significantly reduced the available time to isolate the leaking RHR pump seal. Violations of 10 CFR 50.59 are dispositioned using the traditional enforcement process instead of the SDP because they are considered to be violations that potentially impede or impact the regulatory process. In addition, the associated violation was determined to be more than minor because the inspectors could not reasonably determine that the changes would not have ultimately required NRC prior approval. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. The inspectors determined that the associated finding did not have a cross cutting aspect because the finding was not

reflective of current performance.

Inspection Report# : [2015003](#) (*pdf*)

Significance:  Aug 28, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Evaluate Containment spray system for Potential Gas Intrusion (Section 1R17.1b)

Green. The inspectors identified a finding of very low safety significance, and an associated NCV of Title 10, Code of Federal Regulations, Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to evaluate for potential gas intrusion from the spray additive tank into the containment spray (CS) system during the injection phase of a design-basis accident. As part of immediate corrective actions, the licensee entered the concern in the Corrective Action Process as AR 2068569, and performed an evaluation which determined no air entrainment is expected to occur during the injection phase.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems cornerstone attribute of equipment performance, and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, air intrusion into the CS system could affect the operability of the CS pumps by causing degraded performance and/or air binding of the pumps. The finding screened as having very low safety significance. Specifically, the finding was a deficiency affecting the design or qualification of a mitigating structure, system, or component (SSC), however, based on the evaluation performed by the licensee the SSC maintained its operability. Based on the timeframe of the violation the inspectors did not identify a cross-cutting aspect associated with this finding. (Section 1R17.1b)

Inspection Report# : [2015010](#) (*pdf*)

Significance:  Jul 10, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Demonstrate the Functionality of a Credited Safe Shutdown Component (Section 40A2.2b.(2))

The inspectors identified a finding of very low safety significance and an associated NCV of license condition 4.F for the licensee's failure to demonstrate the capabilities of systems needed to perform a design function for Appendix R cold shutdown. Specifically, none of the licensee's tests, inspections, or maintenance activities demonstrated that CC-722A, the component cooling water pump suction cross tie valve, was capable of being opened as required in AOP 10B, "Safe to Cold Shutdown in Local Control." The licensee corrective actions included entering the issue into their CA program, declaring CC-722A non functional, and commencing four-hour fire rounds.

The inspectors determined the finding to be more than minor because the failure to demonstrate the capabilities of systems needed to perform a design function for Appendix R safe shutdown was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). In accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding affected the ability to reach and maintain safe shutdown, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors screened the issue to Green under the Phase 1 Screening Question 1.3.1-A, because the inspectors determined that the finding would not prevent the reactor from reaching and maintaining hot shutdown. This finding has a cross-cutting aspect of Resolution (P.3), in the area of problem identification and resolution, because the licensee did not take effective corrective actions to address the issue in a timely manner. Specifically, in 2007, the licensee identified that they had not been testing the valve as specified in their Fire Protection Evaluation Report and as of July 2015 had still not corrected it. (Section 40A2b.(2))

Inspection Report# : [2015007](#) (pdf)

Significance: G Jun 30, 2015

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Inadequate Measures to Control Spare Firing Card Assemblies

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion XV, "Nonconforming Materials, Parts, or Components," was self-revealed for the licensee's failure to establish measures to ensure non-conforming tantalum electrolytic capacitors that were part of an assembly and that were beyond their recommended shelf-life would not be installed in safety-related equipment in the plant. The licensee's corrective actions included repair of the D-107 battery charger, and updating maintenance and procurement requirements with component shelf-life information.

The finding was determined to be more than minor since the failure to ensure the quality of spare parts, if left uncorrected, could lead to a more significant safety concern. Specifically, the failure to control circuit boards which contained tantalum electrolytic capacitors that were beyond their shelf-life was self-revealed when the D-107 safety-related battery charger failed three days after the circuit boards were installed. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 2, Mitigating Systems Screening Questions, dated June 19, 2012. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross-cutting aspect of Change Management (H.3), in the area of Human Performance, for the licensee's failure to use a systematic process for implementing changes so that nuclear safety remained the overriding priority. (Section 1R12.1)

Inspection Report# : [2015002](#) (pdf)

Significance: G Jun 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Control Transient Combustibles During Service Water Pumphouse Maintenance

A finding of very low safety significance and associated NCV of Technical Specification (TS) 5.4.1.h was identified by the inspectors for the failure to control transient combustible material in accordance with the licensee's Fire Protection Program requirements. Specifically, the licensee installed a power cord in the north side of the service water pump room that was subsequently extended also into the south side of the service water pump room across a transient combustible exclusion boundary with no prior evaluation. The licensee's corrective actions included immediately removing the power cord from the fire exclusion zone and standing-down the work group for a brief of the event and a review of the requirements for transient combustibles.

The inspectors determined the finding was more than minor because the failure to identify the transient combustibles was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). In accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding degraded fire protection defense-in-depth strategies, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors screened the issue to Green under the Phase 1 Screening Question 1.3.B, because the inspectors assigned a "Low" degradation rating to the single cable that crossed through the exclusion zone. This finding has a cross-cutting aspect of Field Presence (H.2), in the area of

human performance, because the licensee's leadership did not ensure that oversight of work activities, including contractors and supplemental personnel was provided such that nuclear safety was supported.

Inspection Report# : [2015002](#) (*pdf*)

Significance:  Mar 31, 2015

Identified By: NRC

Item Type: FIN Finding

Failure to Process Vendor Technical Information

A finding of very low safety significance was identified by the inspectors for the failure to follow site procedure NP 7.2.13, "Processing of Vendor Technical Information." Specifically, the licensee failed to process a vendor technical bulletin in accordance with NP 7.2.13. The technical bulletin provided relevant information related to the inspection, adjustment, and replacement of an electrical connector located in some of the licensee's safety-related battery chargers. Procedure NP 7.2.13 ensured that relevant vendor correspondence received by the licensee was analyzed to identify specific actions needed to operate and maintain the plant safely. Licensee corrective actions included conducting a condition evaluation, which concluded that a lack of understanding of current vendor technical document process expectations may exist within key departments. The licensee plans to perform information sharing to increase awareness of expectations for processing vendor documents.

The finding was determined to be more than minor because, if left uncorrected, the finding had the potential to lead to a more safety significant concern. Specifically, if a degraded connector was not identified and corrected during safety-related battery charger maintenance, the charger may fail to limit current and open the supply breaker to the battery charger. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At Power," Exhibit 2, Mitigating Systems Screening Questions, dated June 19, 2012. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross-cutting aspect of Operating Experience (P.5), in the area of Problem Identification and Resolution, for the failure to systematically and effectively collect, evaluate, and implement relevant internal and external operating experience in a timely manner.

Inspection Report# : [2015001](#) (*pdf*)

Significance:  Mar 27, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Promptly Correct Conditions Adverse to Quality Regarding Electrical Power Cable Sizing and Protection (Section 1R21.3.b.(1))

Green. The inspectors identified a finding of very-low safety significance, and an associated Non-Cited Violation of Title 10, Code of Federal Regulations (CFR) Part 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to implement timely corrective actions to address the longstanding issue of electrical power cables that have not been verified to be sized or protected in accordance with their design bases, as described in PBNP's Final Safety Analysis Report Section 8.0.1. Specifically, the licensee failed to correct known deficiencies regarding: (1) power cables with operating currents in excess of their current-carrying capacities; (2) power cables that are not protected against overload in accordance with the National Electrical Code; and (3) power cables for which their current-carrying capacities are undetermined. Although various corrective action documents have been initiated since these issues first came to light in the 1990 to 1991 time period, the licensee has not taken appropriate actions to correct the conditions adverse to quality to this date. The licensee entered this finding into their Corrective Action Program as Condition Report (CR) 02035020 and CR 02035680, with recommended actions to perform ampacity analysis for applicable cables, verify cables are protected against overload in accordance with the National Electrical

Code, verify cable ampacities are higher than their respective load currents, and perform an evaluation to determine why this issue has not been resolved and address the safety culture aspect.

The inspectors determined the licensee's failure to promptly correct the conditions adverse to quality regarding electrical power cables was a performance deficiency warranting a significance determination. The performance deficiency was determined to be more than minor, and a finding in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," because it was associated with the Design Control attribute of the Reactor Safety, Mitigating Systems Cornerstone, and it adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding in accordance with IMC 0609.04, Phase 1, "Initial Screening and Characterization of Findings." The finding screened as having very-low safety significance (Green) because it was a design or qualification deficiency that did not represent a loss of operability or functionality; did not represent an actual loss of safety function on the system or train; did not result in the loss of one or more trains of non-technical specification equipment; and did not screen as potentially risk significant due to seismic, flooding, or severe weather. The inspectors identified a crosscutting aspect associated with this finding in the area of Human Performance, associated with the Design Margin component, because the licensee failed to ensure equipment is operated within design margins, and margins are carefully guarded and changed only through a systematic and rigorous process. [H.6] (Section 1R21.3.b (1))

Inspection Report# : [2015008](#) (pdf)

Significance: G Dec 31, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Promptly Correct a Failed Emergency Diesel Generator Day Tank Room Heater (Section 1R01.1)

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified by the inspectors for the failure to promptly repair the non-functional HX-272A, a safety-related room heater for the G-04 Emergency Diesel Generator (EDG) day tank room. Specifically, HX-272A was identified failed in June 2012 and was not corrected until November 2014 but not before inspectors identified that the redundant room heater, HX-272B, had also failed and the room temperature had dropped below the design basis temperature of 50 degrees Fahrenheit. The licensee repaired HX 272A on November 25, 2014 and also installed a thermometer in the fuel oil day tank room for operators to monitor room temperature. The licensee entered the issue into their CAP as action request (AR) 02018260 and AR 02008296.

The inspectors determined that failing to promptly repair safety-related room heater, HX-272A, G-04 EDG day tank room heater was contrary to 10 CFR 50 Appendix B, Criterion XVI and was a performance deficiency. The inspectors determined that the finding was more than minor, because, if left uncorrected, it could have the potential to become a more significant safety concern. Specifically, the inspectors found both safety-related heaters non-functional in the fuel oil day tank room with outside air blowing into the room through a ventilation damper. The outside temperature was approximately 17 degrees Fahrenheit, and while the licensee determined that at the time their fuel oil cloud point was approximately zero degrees Fahrenheit, the licensee's specification for fuel oil cloud point allowed for a fuel oil cloud point of up to 25 degrees Fahrenheit. Additionally, if the fuel oil day tank room temperatures dropped below freezing, the fire sprinkler piping within the room could have actuated and/or ruptured and adversely affected the safety-related fuel oil transfer pumps within the room. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At Power," Exhibit 2, Mitigating Systems Screening Questions, dated June 19, 2012.

The inspectors concluded that the finding was of very low safety significance because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross cutting aspect of Work Management (H.5), in the area of Human Performance, for failing to implement a process of planning, controlling, and executing work activities such that nuclear safety is an overriding priority. (Section 1R01.1)

Inspection Report# : [2014005](#) (*pdf*)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Significance:  Mar 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Quantify Radionuclides in the Body for Internal Dose Assessments

The inspectors identified a finding of very low safety significance, and an associated NCV of 10 CFR 20.1204 for the licensee's failure to take suitable measurements of quantities of radionuclides in the body for assessing internal dose for occupational exposure control. Immediate corrective actions included an evaluation of previous internal dose assessments to determine the extent of missed dose. Planned corrective actions include a review of procedures to ensure data is not disregarded without sound technical justification, and review of the duration of time for which whole-body counts are performed.

In accordance with IMC 0612, Appendix B, "Issue Screening," the inspectors determined that the performance deficiency was more than minor because it was associated with the program and process attribute of the occupational radiation safety cornerstone, and adversely affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation, in that, the failure to adequately assess internal exposure affects the licensee's ability to control and limit radiation exposure. The inspectors also reviewed IMC 0612, Appendix E, "Examples of Minor Issues," and did not find any similar examples. Using IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," the inspectors determined that the finding was of very low safety significance (Green) because the finding did not involve: (1) as-low-as-reasonably-achievable (ALARA) planning and controls; (2) a radiological overexposure; (3) a substantial potential for an overexposure; or (4) a compromised ability to assess dose. The primary cause of the finding is related to the cross-cutting aspect of resources in the human performance area (H.1). Specifically, procedures governing whole-body counting allow for the discounting of information without a proper technical justification. (Section 2RS4.1)

Inspection Report# : [2015001](#) (*pdf*)

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : December 15, 2015

Point Beach 2 4Q/2015 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Dec 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Follow Fire Protection Program Requirements for Care, Use and Maintenance of Fire Hose

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of license condition 4.F for the licensee's failure to have procedures or instructions to prevent firefighting booster hoses from being kinked and/or twisted on hose reels. Specifically, booster hoses were installed on hose reels in both unit's containments and in the turbine building (TB), which were twisted and kinked. The licensee's corrective actions included rewinding hoses in the Unit 2 containment, four hoses in the TB, and creating compensatory measures for hose reels for the Unit 1 containment.

The finding was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. Specifically, the licensee failed to ensure that activities such as inspection, testing, and maintenance of fire protection systems were prescribed and accomplished in accordance with documented instructions, procedures, and drawings. In accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding degraded fire protection defense-in-depth strategies, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors screened the issue to Green under the Phase 1 Screening Question 1.3.1-A, because the inspectors determined that the impact of a fire would be limited to one train/division of equipment for the affected fire areas and at least one credited safe shutdown path would be unaffected. This finding has a cross-cutting aspect of Training (H.9), in the area of human performance, because the licensee did not provide training and ensure knowledge transfer to maintain a knowledgeable, technically competent workforce, and instill nuclear safety values. Specifically, the inspectors determined that operations personnel were not adequately trained to recognize deficiencies associated with firefighting equipment standards, such as kinked and twisted hoses on hose reels, and subsequently failed to initiate actions to remedy such conditions.

Inspection Report# : [2015004](#) (pdf)

Significance: G Dec 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Inadequate Evaluation of Non-Conforming Auxiliary Feedwater System Pipe Defects

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to maintain a Unit 2 auxiliary feedwater

system (AFW) pipe segment containing linear defects in accordance with the design and material specifications. As a corrective action, the licensee performed light filing to remove the defects from this pipe segment. The licensee entered the failure to maintain the AFW pipe segment in accordance with the design into the corrective action program (CAP) as action request (AR) 02084077, and was evaluating additional corrective actions.

This finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because if left uncorrected the performance deficiency had the potential to lead to a more significant safety concern. Specifically, the licensee's failure to maintain the Unit 2 AFW pipe segment containing linear defects in accordance with the design and material specifications could result in an increase in the possibility of pipe leakage or failure. In addition, the failure to maintain the AFW pipe segment containing linear defects in accordance with the design and material specification adversely affected the Mitigating System Cornerstone attribute of Equipment Performance because it could result in failure of AFW piping which would reduce the availability and reliability of the this mitigating system. The inspectors evaluated the finding in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," and Exhibit 2, "Mitigating Systems Screening Questions," of IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power." The inspectors answered "Yes" to screening question A.1 of Exhibit 2. Although this finding adversely affected the design or qualification of the AFW pipe segments, the finding screened as very low safety significance (Green), because it did not result in the loss of operability or functionality of the affected pipe segment. This finding has a cross cutting aspect in the Teamwork (H.4) component of the human performance cross cutting area. Specifically, the licensee's Projects Team responsible for the AFW modifications did not effectively communicate and coordinate with the licensee's Programs Engineering Group for resolution of the AFW pipe nonconforming conditions to ensure nuclear safety was maintained.

Inspection Report# : [2015004](#) (pdf)

Significance:  Sep 30, 2015

Identified By: NRC

Item Type: FIN Finding

Incomplete Functionality Assessment for Flooding in the Diesel Generator Building

The inspectors identified a finding of very low safety significance for the licensee's failure to follow procedure EN AA 203 1001, "Operability Determinations/Functionality Assessments," Revision 19. Specifically, when the licensee identified that internal flood sources in the diesel generator building (DGB) were larger than the drain capacity, they failed to identify all affected structures, systems, and components (SSCs). The DGB contains predominately Train B emergency power systems; however, the fuel oil transfer pumps for the Train A emergency diesel generators are located in the southeast corner of the building. The licensee failed to assess the effects of flooding on the Train A fuel oil transfer pumps. The licensee's corrective actions included the creation of an adverse condition monitoring plan, which implemented an hourly flood watch in the DGB when the fire pump was manually started.

The inspectors determined that the finding was more than minor, because if left uncorrected, it would potentially result in a more safety significant issue. Specifically, the failure to evaluate the effects of flooding on all SSCs resulted in inadequate compensatory measures. The inspectors determined the finding could be evaluated using the significance determination process (SDP) in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012. For the time period in question, May 17, 2015 to September 17, 2015, the inspectors reviewed the security door card reader reports and starting sump levels for the DGB and found that during times when the fire pumps were running, station personnel had toured the DGB at a frequency that would have identified flooding conditions before a loss of system function. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross-cutting aspect of Evaluation (P.2), in the area of Problem Identification and Resolution (PI&R), for failing to thoroughly

evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance.

Inspection Report# : [2015003](#) (pdf)

Significance:  Sep 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Potential Failure of Multiple Safety-Related Trains During Flooding Events

The inspectors identified a finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to ensure that a non Category I (seismic) component failure, that results in flooding, would not adversely affect safety related equipment needed to get the plant to safe shutdown (SSD) or to limit the consequences of an accident. Specifically, the design of Point Beach did not ensure that the Residual Heat Removal (RHR) pumps would be protected from all credible non Category I (seismic) system failures. The licensee's corrective actions included an extensive internal flooding design review, which will result in an updated Final Safety Analysis Report (FSAR) with a more detailed description of the station's flooding licensing basis; modifications to multiple flood barriers to bring them into compliance with the licensee's flooding licensing basis; installation of additional flood level alarms where necessary, and evaluation or modification of service water (SW) piping to properly qualify it as seismic.

The inspectors determined that the finding was more than minor because it was associated with the Design Control attribute of the Mitigating System cornerstone and affected the cornerstone objective of ensuring the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the inadequate design resulted in an unanalyzed condition and loss of safety function of the RHR system while the plants were in Modes 4, 5, and 6, when relying on the RHR system for decay heat removal. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012. The inspectors answered "yes" to question 2 of the screening questions because the finding represented a loss of safety function. Thus the inspectors consulted the Region III Senior Risk Analysts (SRAs) who performed a detailed risk evaluation and determined that the finding was of very low safety significance (Green). The inspectors determined that the associated finding did not have a cross-cutting aspect because the finding was not reflective of current performance.

Inspection Report# : [2015003](#) (pdf)

Significance:  Sep 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Perform a Written Safety Evaluation for FSAR Changes

The inspectors identified a Severity Level IV NCV of 10 CFR 50.59(d)(1), "Changes, Tests, and Experiments," and an associated finding of very low safety significance for the licensee's failure to perform a safety evaluation to demonstrate that the removal of statements from the FSAR did not require a license amendment. Specifically, the licensee failed to perform a safety evaluation to determine whether removing an FSAR statement, which defined the RHR pump cubicle design flood height as seven feet, could be performed without a license amendment. The licensee entered the deficiency in their CAP as Action Request (AR) 02069425 by which the licensee intends on re-evaluating the 1996 FSAR change.

The inspectors determined that the finding was more than minor because the finding, if left uncorrected, would

become a more significant safety concern. Specifically, inappropriately removing the information from the FSAR allowed the licensee to decrease the design basis flood protection height of the RHR compartments and significantly reduced the available time to isolate the leaking RHR pump seal. Violations of 10 CFR 50.59 are dispositioned using the traditional enforcement process instead of the SDP because they are considered to be violations that potentially impede or impact the regulatory process. In addition, the associated violation was determined to be more than minor because the inspectors could not reasonably determine that the changes would not have ultimately required NRC prior approval. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. The inspectors determined that the associated finding did not have a cross cutting aspect because the finding was not reflective of current performance.

Inspection Report# : [2015003](#) (pdf)

Significance:  Aug 28, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Evaluate Containment spray system for Potential Gas Intrusion (Section 1R17.1b)

Green. The inspectors identified a finding of very low safety significance, and an associated NCV of Title 10, Code of Federal Regulations, Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to evaluate for potential gas intrusion from the spray additive tank into the containment spray (CS) system during the injection phase of a design-basis accident. As part of immediate corrective actions, the licensee entered the concern in the Corrective Action Process as AR 2068569, and performed an evaluation which determined no air entrainment is expected to occur during the injection phase.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems cornerstone attribute of equipment performance, and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, air intrusion into the CS system could affect the operability of the CS pumps by causing degraded performance and/or air binding of the pumps. The finding screened as having very low safety significance. Specifically, the finding was a deficiency affecting the design or qualification of a mitigating structure, system, or component (SSC), however, based on the evaluation performed by the licensee the SSC maintained its operability. Based on the timeframe of the violation the inspectors did not identify a cross-cutting aspect associated with this finding. (Section 1R17.1b)

Inspection Report# : [2015010](#) (pdf)

Significance:  Jul 10, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Demonstrate the Functionality of a Credited Safe Shutdown Component (Section 40A2.2b.(2))

The inspectors identified a finding of very low safety significance and an associated NCV of license condition 4.F for the licensee's failure to demonstrate the capabilities of systems needed to perform a design function for Appendix R cold shutdown. Specifically, none of the licensee's tests, inspections, or maintenance activities demonstrated that CC-722A, the component cooling water pump suction cross tie valve, was capable of being opened as required in AOP 10B, "Safe to Cold Shutdown in Local Control." The licensee corrective actions included entering the issue into their CA program, declaring CC-722A non functional, and commencing four-hour fire rounds.

The inspectors determined the finding to be more than minor because the failure to demonstrate the capabilities of

systems needed to perform a design function for Appendix R safe shutdown was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). In accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding affected the ability to reach and maintain safe shutdown, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors screened the issue to Green under the Phase 1 Screening Question 1.3.1-A, because the inspectors determined that the finding would not prevent the reactor from reaching and maintaining hot shutdown. This finding has a cross-cutting aspect of Resolution (P.3), in the area of problem identification and resolution, because the licensee did not take effective corrective actions to address the issue in a timely manner. Specifically, in 2007, the licensee identified that they had not been testing the valve as specified in their Fire Protection Evaluation Report and as of July 2015 had still not corrected it. (Section 40A2b.(2))

Inspection Report# : [2015007](#) (*pdf*)

Significance:  Jun 30, 2015

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Inadequate Measures to Control Spare Firing Card Assemblies

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion XV, "Nonconforming Materials, Parts, or Components," was self-revealed for the licensee's failure to establish measures to ensure non-conforming tantalum electrolytic capacitors that were part of an assembly and that were beyond their recommended shelf-life would not be installed in safety-related equipment in the plant. The licensee's corrective actions included repair of the D-107 battery charger, and updating maintenance and procurement requirements with component shelf-life information.

The finding was determined to be more than minor since the failure to ensure the quality of spare parts, if left uncorrected, could lead to a more significant safety concern. Specifically, the failure to control circuit boards which contained tantalum electrolytic capacitors that were beyond their shelf-life was self-revealed when the D-107 safety-related battery charger failed three days after the circuit boards were installed. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 2, Mitigating Systems Screening Questions, dated June 19, 2012. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross-cutting aspect of Change Management (H.3), in the area of Human Performance, for the licensee's failure to use a systematic process for implementing changes so that nuclear safety remained the overriding priority. (Section 1R12.1)

Inspection Report# : [2015002](#) (*pdf*)

Significance:  Jun 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Control Transient Combustibles During Service Water Pumphouse Maintenance

A finding of very low safety significance and associated NCV of Technical Specification (TS) 5.4.1.h was identified by the inspectors for the failure to control transient combustible material in accordance with the licensee's Fire Protection Program requirements. Specifically, the licensee installed a power cord in the north side of the service water pump room that was subsequently extended also into the south side of the service water pump room across a transient combustible exclusion boundary with no prior evaluation. The licensee's corrective actions included

immediately removing the power cord from the fire exclusion zone and standing-down the work group for a brief of the event and a review of the requirements for transient combustibles.

The inspectors determined the finding was more than minor because the failure to identify the transient combustibles was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). In accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding degraded fire protection defense-in-depth strategies, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors screened the issue to Green under the Phase 1 Screening Question 1.3.B, because the inspectors assigned a "Low" degradation rating to the single cable that crossed through the exclusion zone. This finding has a cross-cutting aspect of Field Presence (H.2), in the area of human performance, because the licensee's leadership did not ensure that oversight of work activities, including contractors and supplemental personnel was provided such that nuclear safety was supported.

Inspection Report# : [2015002](#) (*pdf*)

Significance:  Mar 31, 2015

Identified By: NRC

Item Type: FIN Finding

Failure to Process Vendor Technical Information

A finding of very low safety significance was identified by the inspectors for the failure to follow site procedure NP 7.2.13, "Processing of Vendor Technical Information." Specifically, the licensee failed to process a vendor technical bulletin in accordance with NP 7.2.13. The technical bulletin provided relevant information related to the inspection, adjustment, and replacement of an electrical connector located in some of the licensee's safety-related battery chargers. Procedure NP 7.2.13 ensured that relevant vendor correspondence received by the licensee was analyzed to identify specific actions needed to operate and maintain the plant safely. Licensee corrective actions included conducting a condition evaluation, which concluded that a lack of understanding of current vendor technical document process expectations may exist within key departments. The licensee plans to perform information sharing to increase awareness of expectations for processing vendor documents.

The finding was determined to be more than minor because, if left uncorrected, the finding had the potential to lead to a more safety significant concern. Specifically, if a degraded connector was not identified and corrected during safety-related battery charger maintenance, the charger may fail to limit current and open the supply breaker to the battery charger. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At Power," Exhibit 2, Mitigating Systems Screening Questions, dated June 19, 2012. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross-cutting aspect of Operating Experience (P.5), in the area of Problem Identification and Resolution, for the failure to systematically and effectively collect, evaluate, and implement relevant internal and external operating experience in a timely manner.

Inspection Report# : [2015001](#) (*pdf*)

Significance:  Mar 27, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Promptly Correct Conditions Adverse to Quality Regarding Electrical Power Cable Sizing and Protection (Section 1R21.3.b.(1))

Green. The inspectors identified a finding of very-low safety significance, and an associated Non-Cited Violation of Title 10, Code of Federal Regulations (CFR) Part 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to implement timely corrective actions to address the longstanding issue of electrical power cables that have not been verified to be sized or protected in accordance with their design bases, as described in PBNP's Final Safety Analysis Report Section 8.0.1. Specifically, the licensee failed to correct known deficiencies regarding: (1) power cables with operating currents in excess of their current-carrying capacities; (2) power cables that are not protected against overload in accordance with the National Electrical Code; and (3) power cables for which their current-carrying capacities are undetermined. Although various corrective action documents have been initiated since these issues first came to light in the 1990 to 1991 time period, the licensee has not taken appropriate actions to correct the conditions adverse to quality to this date. The licensee entered this finding into their Corrective Action Program as Condition Report (CR) 02035020 and CR 02035680, with recommended actions to perform ampacity analysis for applicable cables, verify cables are protected against overload in accordance with the National Electrical Code, verify cable ampacities are higher than their respective load currents, and perform an evaluation to determine why this issue has not been resolved and address the safety culture aspect.

The inspectors determined the licensee's failure to promptly correct the conditions adverse to quality regarding electrical power cables was a performance deficiency warranting a significance determination. The performance deficiency was determined to be more than minor, and a finding in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," because it was associated with the Design Control attribute of the Reactor Safety, Mitigating Systems Cornerstone, and it adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the finding in accordance with IMC 0609.04, Phase 1, "Initial Screening and Characterization of Findings." The finding screened as having very-low safety significance (Green) because it was a design or qualification deficiency that did not represent a loss of operability or functionality; did not represent an actual loss of safety function on the system or train; did not result in the loss of one or more trains of non-technical specification equipment; and did not screen as potentially risk significant due to seismic, flooding, or severe weather. The inspectors identified a crosscutting aspect associated with this finding in the area of Human Performance, associated with the Design Margin component, because the licensee failed to ensure equipment is operated within design margins, and margins are carefully guarded and changed only through a systematic and rigorous process. [H.6] (Section 1R21.3.b (1))

Inspection Report# : [2015008](#) (*pdf*)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Significance:  Mar 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Quantify Radionuclides in the Body for Internal Dose Assessments

The inspectors identified a finding of very low safety significance, and an associated NCV of 10 CFR 20.1204 for the licensee's failure to take suitable measurements of quantities of radionuclides in the body for assessing internal dose for occupational exposure control. Immediate corrective actions included an evaluation of previous internal dose assessments to determine the extent of missed dose. Planned corrective actions include a review of procedures to ensure data is not disregarded without sound technical justification, and review of the duration of time for which whole-body counts are performed.

In accordance with IMC 0612, Appendix B, "Issue Screening," the inspectors determined that the performance deficiency was more than minor because it was associated with the program and process attribute of the occupational radiation safety cornerstone, and adversely affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation, in that, the failure to adequately assess internal exposure affects the licensee's ability to control and limit radiation exposure. The inspectors also reviewed IMC 0612, Appendix E, "Examples of Minor Issues," and did not find any similar examples. Using IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," the inspectors determined that the finding was of very low safety significance (Green) because the finding did not involve: (1) as-low-as-reasonably-achievable (ALARA) planning and controls; (2) a radiological overexposure; (3) a substantial potential for an overexposure; or (4) a compromised ability to assess dose. The primary cause of the finding is related to the cross-cutting aspect of resources in the human performance area (H.1). Specifically, procedures governing whole-body counting allow for the discounting of information without a proper technical justification. (Section 2RS4.1)

Inspection Report# : [2015001](#) (*pdf*)

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : March 01, 2016

Point Beach 2

1Q/2016 Plant Inspection Findings

Initiating Events

Significance:  Mar 31, 2016

Identified By: Self-Revealing

Item Type: FIN Finding

Failure to Follow Electrical Safety Procedures Results in Plant Transient

A finding of very low safety significance was self-revealed for the licensee's failure to follow electrical safety procedures when hanging danger tags on electrical components with exposed conductors. Specifically, danger tags were attached directly to the exposed energized portion of switchgear test switches, which exposed employees to an electrical hazard and contributed to the lockout of the 2X-01 main transformers and the subsequent Unit 2 plant transient. The licensee's corrective actions included a change to tagging procedures to include specific direction for tagging knife switches. The proposed changes included a prohibition for hanging tags on metal parts of the switches, and installing robust operational barriers using tags plus devices when danger tags are to be utilized.

The inspectors determined that the finding was more than minor because it was associated with the human performance attribute of the initiating events cornerstone, and adversely affected the cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the failure to use insulated tools on exposed electrical equipment greater than 50 volts presented an electrical injury hazard and actually resulted in a plant transient for Unit 2, which included lifting of a pressurizer power-operated relief valve (PORV), loss of forced reactor coolant system (RCS) flow, and actuation of the auxiliary feedwater (AFW) system. The inspectors determined the finding could be evaluated in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, because Unit 2 was in mode 3 at the time of the event. Additionally, Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 1, "Initiating Events Screening Questions," dated June 19, 2012 applied. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Transient Initiators screening question. This finding has a cross-cutting aspect of Resources (H.1), in the area of Human Performance for failing to ensure that personnel, equipment procedures and other resources were available and adequate to support nuclear safety. Specifically, the licensee failed to ensure that employees had all necessary tools, direction, and supervision to support successful work performance.

Inspection Report# : [2016001](#) (*pdf*)

Mitigating Systems

Significance:  Dec 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Follow Fire Protection Program Requirements for Care, Use and Maintenance of Fire Hose

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of license condition 4.F for the licensee's failure to have procedures or instructions to prevent firefighting booster hoses from being kinked and/or twisted on hose reels. Specifically, booster hoses were installed on hose reels in both unit's containments and in the turbine building (TB), which were twisted and kinked. The licensee's corrective actions

included rewinding hoses in the Unit 2 containment, four hoses in the TB, and creating compensatory measures for hose reels for the Unit 1 containment.

The finding was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. Specifically, the licensee failed to ensure that activities such as inspection, testing, and maintenance of fire protection systems were prescribed and accomplished in accordance with documented instructions, procedures, and drawings. In accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding degraded fire protection defense-in-depth strategies, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors screened the issue to Green under the Phase 1 Screening Question 1.3.1-A, because the inspectors determined that the impact of a fire would be limited to one train/division of equipment for the affected fire areas and at least one credited safe shutdown path would be unaffected. This finding has a cross-cutting aspect of Training (H.9), in the area of human performance, because the licensee did not provide training and ensure knowledge transfer to maintain a knowledgeable, technically competent workforce, and instill nuclear safety values. Specifically, the inspectors determined that operations personnel were not adequately trained to recognize deficiencies associated with firefighting equipment standards, such as kinked and twisted hoses on hose reels, and subsequently failed to initiate actions to remedy such conditions.

Inspection Report# : [2015004](#) (*pdf*)

Significance: G Dec 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Inadequate Evaluation of Non-Conforming Auxiliary Feedwater System Pipe Defects

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to maintain a Unit 2 auxiliary feedwater system (AFW) pipe segment containing linear defects in accordance with the design and material specifications. As a corrective action, the licensee performed light filing to remove the defects from this pipe segment. The licensee entered the failure to maintain the AFW pipe segment in accordance with the design into the corrective action program (CAP) as action request (AR) 02084077, and was evaluating additional corrective actions.

This finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because if left uncorrected the performance deficiency had the potential to lead to a more significant safety concern. Specifically, the licensee's failure to maintain the Unit 2 AFW pipe segment containing linear defects in accordance with the design and material specifications could result in an increase in the possibility of pipe leakage or failure. In addition, the failure to maintain the AFW pipe segment containing linear defects in accordance with the design and material specification adversely affected the Mitigating System Cornerstone attribute of Equipment Performance because it could result in failure of AFW piping which would reduce the availability and reliability of the this mitigating system. The inspectors evaluated the finding in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," and Exhibit 2, "Mitigating Systems Screening Questions," of IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power." The inspectors answered "Yes" to screening question A.1 of Exhibit 2. Although this finding adversely affected the design or qualification of the AFW pipe segments, the finding screened as very low safety significance (Green), because it did not result in the loss of operability or functionality of the affected pipe segment. This finding has a cross cutting aspect in the Teamwork (H.4) component of the human performance cross cutting area. Specifically, the licensee's Projects Team responsible for the AFW modifications did not effectively communicate and coordinate with the licensee's Programs Engineering Group for resolution of the AFW pipe nonconforming conditions to ensure nuclear safety was maintained.

Inspection Report# : [2015004](#) (pdf)

Significance:  Sep 30, 2015

Identified By: NRC

Item Type: FIN Finding

Incomplete Functionality Assessment for Flooding in the Diesel Generator Building

The inspectors identified a finding of very low safety significance for the licensee's failure to follow procedure EN AA 203 1001, "Operability Determinations/Functionality Assessments," Revision 19. Specifically, when the licensee identified that internal flood sources in the diesel generator building (DGB) were larger than the drain capacity, they failed to identify all affected structures, systems, and components (SSCs). The DGB contains predominately Train B emergency power systems; however, the fuel oil transfer pumps for the Train A emergency diesel generators are located in the southeast corner of the building. The licensee failed to assess the effects of flooding on the Train A fuel oil transfer pumps. The licensee's corrective actions included the creation of an adverse condition monitoring plan, which implemented an hourly flood watch in the DGB when the fire pump was manually started.

The inspectors determined that the finding was more than minor, because if left uncorrected, it would potentially result in a more safety significant issue. Specifically, the failure to evaluate the effects of flooding on all SSCs resulted in inadequate compensatory measures. The inspectors determined the finding could be evaluated using the significance determination process (SDP) in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012. For the time period in question, May 17, 2015 to September 17, 2015, the inspectors reviewed the security door card reader reports and starting sump levels for the DGB and found that during times when the fire pumps were running, station personnel had toured the DGB at a frequency that would have identified flooding conditions before a loss of system function. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross-cutting aspect of Evaluation (P.2), in the area of Problem Identification and Resolution (PI&R), for failing to thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance.

Inspection Report# : [2015003](#) (pdf)

Significance:  Sep 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Potential Failure of Multiple Safety-Related Trains During Flooding Events

The inspectors identified a finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to ensure that a non Category I (seismic) component failure, that results in flooding, would not adversely affect safety related equipment needed to get the plant to safe shutdown (SSD) or to limit the consequences of an accident. Specifically, the design of Point Beach did not ensure that the Residual Heat Removal (RHR) pumps would be protected from all credible non Category I (seismic) system failures. The licensee's corrective actions included an extensive internal flooding design review, which will result in an updated Final Safety Analysis Report (FSAR) with a more detailed description of the station's flooding licensing basis; modifications to multiple flood barriers to bring them into compliance with the licensee's flooding licensing basis; installation of additional flood level alarms where necessary, and evaluation or modification of service water (SW) piping to properly qualify it as seismic.

The inspectors determined that the finding was more than minor because it was associated with the Design Control attribute of the Mitigating System cornerstone and affected the cornerstone objective of ensuring the availability,

reliability and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the inadequate design resulted in an unanalyzed condition and loss of safety function of the RHR system while the plants were in Modes 4, 5, and 6, when relying on the RHR system for decay heat removal. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012. The inspectors answered "yes" to question 2 of the screening questions because the finding represented a loss of safety function. Thus the inspectors consulted the Region III Senior Risk Analysts (SRAs) who performed a detailed risk evaluation and determined that the finding was of very low safety significance (Green). The inspectors determined that the associated finding did not have a cross-cutting aspect because the finding was not reflective of current performance.

Inspection Report# : [2015003](#) (pdf)

Significance:  Sep 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Perform a Written Safety Evaluation for FSAR Changes

The inspectors identified a Severity Level IV NCV of 10 CFR 50.59(d)(1), "Changes, Tests, and Experiments," and an associated finding of very low safety significance for the licensee's failure to perform a safety evaluation to demonstrate that the removal of statements from the FSAR did not require a license amendment. Specifically, the licensee failed to perform a safety evaluation to determine whether removing an FSAR statement, which defined the RHR pump cubicle design flood height as seven feet, could be performed without a license amendment. The licensee entered the deficiency in their CAP as Action Request (AR) 02069425 by which the licensee intends on re-evaluating the 1996 FSAR change.

The inspectors determined that the finding was more than minor because the finding, if left uncorrected, would become a more significant safety concern. Specifically, inappropriately removing the information from the FSAR allowed the licensee to decrease the design basis flood protection height of the RHR compartments and significantly reduced the available time to isolate the leaking RHR pump seal. Violations of 10 CFR 50.59 are dispositioned using the traditional enforcement process instead of the SDP because they are considered to be violations that potentially impede or impact the regulatory process. In addition, the associated violation was determined to be more than minor because the inspectors could not reasonably determine that the changes would not have ultimately required NRC prior approval. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. The inspectors determined that the associated finding did not have a cross cutting aspect because the finding was not reflective of current performance.

Inspection Report# : [2015003](#) (pdf)

Significance:  Aug 28, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Evaluate Containment spray system for Potential Gas Intrusion (Section 1R17.1b)

Green. The inspectors identified a finding of very low safety significance, and an associated NCV of Title 10, Code of Federal Regulations, Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to evaluate for

potential gas intrusion from the spray additive tank into the containment spray (CS) system during the injection phase of a design-basis accident. As part of immediate corrective actions, the licensee entered the concern in the Corrective Action Process as AR 2068569, and performed an evaluation which determined no air entrainment is expected to occur during the injection phase.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems cornerstone attribute of equipment performance, and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, air intrusion into the CS system could affect the operability of the CS pumps by causing degraded performance and/or air binding of the pumps. The finding screened as having very low safety significance. Specifically, the finding was a deficiency affecting the design or qualification of a mitigating structure, system, or component (SSC), however, based on the evaluation performed by the licensee the SSC maintained its operability. Based on the timeframe of the violation the inspectors did not identify a cross-cutting aspect associated with this finding. (Section 1R17.1b)

Inspection Report# : [2015010](#) (pdf)

Significance:  Jul 10, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Demonstrate the Functionality of a Credited Safe Shutdown Component (Section 40A2.2b.(2))

The inspectors identified a finding of very low safety significance and an associated NCV of license condition 4.F for the licensee's failure to demonstrate the capabilities of systems needed to perform a design function for Appendix R cold shutdown. Specifically, none of the licensee's tests, inspections, or maintenance activities demonstrated that CC-722A, the component cooling water pump suction cross tie valve, was capable of being opened as required in AOP 10B, "Safe to Cold Shutdown in Local Control." The licensee corrective actions included entering the issue into their CA program, declaring CC-722A non functional, and commencing four-hour fire rounds.

The inspectors determined the finding to be more than minor because the failure to demonstrate the capabilities of systems needed to perform a design function for Appendix R safe shutdown was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). In accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding affected the ability to reach and maintain safe shutdown, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors screened the issue to Green under the Phase 1 Screening Question 1.3.1-A, because the inspectors determined that the finding would not prevent the reactor from reaching and maintaining hot shutdown. This finding has a cross-cutting aspect of Resolution (P.3), in the area of problem identification and resolution, because the licensee did not take effective corrective actions to address the issue in a timely manner. Specifically, in 2007, the licensee identified that they had not been testing the valve as specified in their Fire Protection Evaluation Report and as of July 2015 had still not corrected it. (Section 40A2b.(2))

Inspection Report# : [2015007](#) (pdf)

Significance:  Jun 30, 2015

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Inadequate Measures to Control Spare Firing Card Assemblies

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion XV, "Nonconforming Materials, Parts, or Components," was self-revealed for the licensee's failure to establish measures

to ensure non-conforming tantalum electrolytic capacitors that were part of an assembly and that were beyond their recommended shelf-life would not be installed in safety-related equipment in the plant. The licensee's corrective actions included repair of the D-107 battery charger, and updating maintenance and procurement requirements with component shelf-life information.

The finding was determined to be more than minor since the failure to ensure the quality of spare parts, if left uncorrected, could lead to a more significant safety concern. Specifically, the failure to control circuit boards which contained tantalum electrolytic capacitors that were beyond their shelf-life was self-revealed when the D-107 safety-related battery charger failed three days after the circuit boards were installed. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 2, Mitigating Systems Screening Questions, dated June 19, 2012. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross-cutting aspect of Change Management (H.3), in the area of Human Performance, for the licensee's failure to use a systematic process for implementing changes so that nuclear safety remained the overriding priority. (Section 1R12.1)

Inspection Report# : [2015002](#) (pdf)

Significance:  Jun 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Control Transient Combustibles During Service Water Pumphouse Maintenance

A finding of very low safety significance and associated NCV of Technical Specification (TS) 5.4.1.h was identified by the inspectors for the failure to control transient combustible material in accordance with the licensee's Fire Protection Program requirements. Specifically, the licensee installed a power cord in the north side of the service water pump room that was subsequently extended also into the south side of the service water pump room across a transient combustible exclusion boundary with no prior evaluation. The licensee's corrective actions included immediately removing the power cord from the fire exclusion zone and standing-down the work group for a brief of the event and a review of the requirements for transient combustibles.

The inspectors determined the finding was more than minor because the failure to identify the transient combustibles was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). In accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding degraded fire protection defense-in-depth strategies, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors screened the issue to Green under the Phase 1 Screening Question 1.3.B, because the inspectors assigned a "Low" degradation rating to the single cable that crossed through the exclusion zone. This finding has a cross-cutting aspect of Field Presence (H.2), in the area of human performance, because the licensee's leadership did not ensure that oversight of work activities, including contractors and supplemental personnel was provided such that nuclear safety was supported.

Inspection Report# : [2015002](#) (pdf)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : July 11, 2016

Point Beach 2

2Q/2016 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Perform Required Fire Watches in Areas Containing Transient Combustibles

A finding of very low safety significance and associated NCV of license condition 4.F was identified by the inspectors for the licensee's failure to conduct required fire watch inspections in accordance with the licensee's Fire Protection Program requirements. Specifically, while conducting fire protection walkdowns of both unit's residual heat removal (RHR) pipeway and heat exchanger rooms, the inspectors discovered numerous transient combustible items in areas that the licensee had controlled using tamper seals on the entrances in lieu of physical entry. The licensee's corrective actions included documenting and quantifying the removal of the items from the zones and additional actions to perform additional evaluation of the fire zones.

The finding was determined to be more than minor because the failure to conduct the required fire watch inspections was associated with the Initiating Events cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). Specifically, the failure to conduct the required fire watch inspections or meet the alternate measures specified by the licensee's engineers, allowed unanalyzed transient combustibles and ignition sources to be present in fire zones that contained both trains of both unit's RHR pumps, heat exchangers and associated equipment. The inspectors determined the finding could be evaluated in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding degraded fire protection defense-in-depth strategies, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors screened the issue under the Phase 1 Screening Question 1.3.1-A, and determined that determined that the finding was of very low safety significance (Green), because the inspectors determined that the impact of a fire would not prevent either reactor from reaching and maintaining safe shutdown (hot). This finding has a cross-cutting aspect of Bases for Decisions (H.10), in the area of human performance, because the licensee's leadership did not ensure that the bases for operational and organizational decisions are communicated in a timely manner. Specifically, the licensee did not periodically verify the understanding of the individuals assigned to fire watches, in particular, that the relief from physical entry and application of a tamper seal required a thorough tour of the zones following any entry into those fire zones.

Inspection Report# : [2016002](#) (*pdf*)

Significance:  Jun 30, 2016

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Incorrectly Wiring Causes Transformer Lockout

A finding of very low safety significance and associated NCV's of TS 3.8.1, "AC Sources Operating" and TS 3.8.2, "AC Sources Shutdown," were self revealed for the licensee's failure to follow procedure RMP 9056-9B, "1X-03, Protective Relay Calibration and Testing." Specifically, a wiring error in the 1X-03 connection box, which occurred in 2013, caused the 1X-03 transformer's differential protection circuitry to lockout the transformer at current levels below the design protection values. The licensee's corrective actions included correcting the improper wiring in the

1X-03 connection box and evaluating other work performed by the same vendor during that timeframe. The inspectors determined that the finding was more than minor because it was associated with the Initiating Events cornerstone attribute of Equipment Performance and affected the cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the lockout of 1X-03 caused a loss of one of the licensee's offsite power lines and also caused a loss of power to multiple station battery chargers placing Unit 2 into limiting condition for operation (LCO) 3.0.3. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 1, Initiating Events Screening Questions, dated June 19, 2012. The inspectors answered "Yes" to the Support System Initiators question; therefore, a Detailed Risk Evaluation was required. Based on the conclusions in the Detailed Risk Evaluation, the SRA determined that the finding was of very low safety significance (Green). This finding has a cross-cutting aspect of Avoid Complacency (H.12), in the area of Human Performance, for failing to implement appropriate error reduction tools. Specifically, the incorrectly performed procedure step, in RMP 9056-9B, clearly specified which terminal point to land the wires on, the terminal points were clearly labeled, and the step required a concurrent verification; however, even with those barriers in place, the task performers still landed the wires on the wrong location.

Inspection Report# : [2016002](#) (*pdf*)

Significance:  Mar 31, 2016

Identified By: Self-Revealing

Item Type: FIN Finding

Failure to Follow Electrical Safety Procedures Results in Plant Transient

A finding of very low safety significance was self-revealed for the licensee's failure to follow electrical safety procedures when hanging danger tags on electrical components with exposed conductors. Specifically, danger tags were attached directly to the exposed energized portion of switchgear test switches, which exposed employees to an electrical hazard and contributed to the lockout of the 2X-01 main transformers and the subsequent Unit 2 plant transient. The licensee's corrective actions included a change to tagging procedures to include specific direction for tagging knife switches. The proposed changes included a prohibition for hanging tags on metal parts of the switches, and installing robust operational barriers using tags plus devices when danger tags are to be utilized.

The inspectors determined that the finding was more than minor because it was associated with the human performance attribute of the initiating events cornerstone, and adversely affected the cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the failure to use insulated tools on exposed electrical equipment greater than 50 volts presented an electrical injury hazard and actually resulted in a plant transient for Unit 2, which included lifting of a pressurizer power-operated relief valve (PORV), loss of forced reactor coolant system (RCS) flow, and actuation of the auxiliary feedwater (AFW) system. The inspectors determined the finding could be evaluated in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, because Unit 2 was in mode 3 at the time of the event. Additionally, Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 1, "Initiating Events Screening Questions," dated June 19, 2012 applied. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Transient Initiators screening question. This finding has a cross-cutting aspect of Resources (H.1), in the area of Human Performance for failing to ensure that personnel, equipment procedures and other resources were available and adequate to support nuclear safety. Specifically, the licensee failed to ensure that employees had all necessary tools, direction, and supervision to support successful work performance.

Inspection Report# : [2016001](#) (*pdf*)

Mitigating Systems

Significance:  Jun 30, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

Submerged Safety-Related Emergency Diesel Generator Fuel Oil Transfer Pump Cables

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” was identified by the inspectors, for the failure to maintain emergency diesel generator (EDG) fuel oil transfer pump safety-related cables in an environment for which they were designed. Specifically, the licensee allowed the safety-related cables to be submerged in water, which was outside of their design, in manhole Z-066B. The licensee’s corrective actions included pumping the water out of the manholes, repairing the failed sump pump, level switch, and alarm circuit; and performing an engineering evaluation to quantify the level of degradation as a result of the submergence.

The performance deficiency was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Initial Characterization of Findings,” issued on June 19, 2012. Specifically, the inspectors used IMC 0609 Appendix A “SDP for Findings At-Power,” issued June 19, 2012, Exhibit 2, “Mitigating Systems Screening Questions” to screen the finding. The finding screened as of very low safety significance (Green) because the inspectors answered "Yes" to the question “does the SSC maintain its operability or functionality.” Specifically, the submergence of the G-01 and G-02 EDG fuel oil transfer pump cables did not render the transfer pumps inoperable. This finding has a cross-cutting aspect Evaluation (P.2) in the area of problem identification and resolution, because the licensee did not thoroughly evaluate problems to ensure that resolutions address causes and extent of conditions, commensurate with their safety significance. Specifically the licensee failed to thoroughly investigate and prioritize the failure of the manhole alarm and pumping system according to the safety significance of the cables contained within the manholes which led to prolonged and unevaluated submergence of the cables.

Inspection Report# : [2016002](#) (*pdf*)

Significance:  Dec 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Follow Fire Protection Program Requirements for Care, Use and Maintenance of Fire Hose

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of license condition 4.F for the licensee’s failure to have procedures or instructions to prevent firefighting booster hoses from being kinked and/or twisted on hose reels. Specifically, booster hoses were installed on hose reels in both unit’s containments and in the turbine building (TB), which were twisted and kinked. The licensee’s corrective actions included rewinding hoses in the Unit 2 containment, four hoses in the TB, and creating compensatory measures for hose reels for the Unit 1 containment.

The finding was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. Specifically, the licensee failed to ensure that activities such as inspection, testing, and maintenance of fire protection systems were prescribed and accomplished in accordance with documented instructions, procedures, and drawings. In accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Initial Characterization of Findings,” Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding degraded fire protection defense-in-depth strategies, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, “Fire Protection Significance Determination Process.” The inspectors screened the issue to Green under the Phase 1 Screening Question 1.3.1-A, because the inspectors determined that the impact of a fire would be limited to one

train/division of equipment for the affected fire areas and at least one credited safe shutdown path would be unaffected. This finding has a cross-cutting aspect of Training (H.9), in the area of human performance, because the licensee did not provide training and ensure knowledge transfer to maintain a knowledgeable, technically competent workforce, and instill nuclear safety values. Specifically, the inspectors determined that operations personnel were not adequately trained to recognize deficiencies associated with firefighting equipment standards, such as kinked and twisted hoses on hose reels, and subsequently failed to initiate actions to remedy such conditions.

Inspection Report# : [2015004](#) (*pdf*)

Significance:  Dec 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Inadequate Evaluation of Non-Conforming Auxiliary Feedwater System Pipe Defects

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to maintain a Unit 2 auxiliary feedwater system (AFW) pipe segment containing linear defects in accordance with the design and material specifications. As a corrective action, the licensee performed light filing to remove the defects from this pipe segment. The licensee entered the failure to maintain the AFW pipe segment in accordance with the design into the corrective action program (CAP) as action request (AR) 02084077, and was evaluating additional corrective actions.

This finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because if left uncorrected the performance deficiency had the potential to lead to a more significant safety concern. Specifically, the licensee's failure to maintain the Unit 2 AFW pipe segment containing linear defects in accordance with the design and material specifications could result in an increase in the possibility of pipe leakage or failure. In addition, the failure to maintain the AFW pipe segment containing linear defects in accordance with the design and material specification adversely affected the Mitigating System Cornerstone attribute of Equipment Performance because it could result in failure of AFW piping which would reduce the availability and reliability of the this mitigating system. The inspectors evaluated the finding in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," and Exhibit 2, "Mitigating Systems Screening Questions," of IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power." The inspectors answered "Yes" to screening question A.1 of Exhibit 2. Although this finding adversely affected the design or qualification of the AFW pipe segments, the finding screened as very low safety significance (Green), because it did not result in the loss of operability or functionality of the affected pipe segment. This finding has a cross cutting aspect in the Teamwork (H.4) component of the human performance cross cutting area. Specifically, the licensee's Projects Team responsible for the AFW modifications did not effectively communicate and coordinate with the licensee's Programs Engineering Group for resolution of the AFW pipe nonconforming conditions to ensure nuclear safety was maintained.

Inspection Report# : [2015004](#) (*pdf*)

Significance:  Sep 30, 2015

Identified By: NRC

Item Type: FIN Finding

Incomplete Functionality Assessment for Flooding in the Diesel Generator Building

The inspectors identified a finding of very low safety significance for the licensee's failure to follow procedure EN AA 203 1001, "Operability Determinations/Functionality Assessments," Revision 19. Specifically, when the licensee identified that internal flood sources in the diesel generator building (DGB) were larger than the drain capacity, they failed to identify all affected structures, systems, and components (SSCs). The DGB contains predominately Train B emergency power systems; however, the fuel oil transfer pumps for the Train A emergency diesel generators are

located in the southeast corner of the building. The licensee failed to assess the effects of flooding on the Train A fuel oil transfer pumps. The licensee's corrective actions included the creation of an adverse condition monitoring plan, which implemented an hourly flood watch in the DGB when the fire pump was manually started.

The inspectors determined that the finding was more than minor, because if left uncorrected, it would potentially result in a more safety significant issue. Specifically, the failure to evaluate the effects of flooding on all SSCs resulted in inadequate compensatory measures. The inspectors determined the finding could be evaluated using the significance determination process (SDP) in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012. For the time period in question, May 17, 2015 to September 17, 2015, the inspectors reviewed the security door card reader reports and starting sump levels for the DGB and found that during times when the fire pumps were running, station personnel had toured the DGB at a frequency that would have identified flooding conditions before a loss of system function. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross-cutting aspect of Evaluation (P.2), in the area of Problem Identification and Resolution (PI&R), for failing to thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance.

Inspection Report# : [2015003](#) (pdf)

Significance: G Sep 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Potential Failure of Multiple Safety-Related Trains During Flooding Events

The inspectors identified a finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to ensure that a non Category I (seismic) component failure, that results in flooding, would not adversely affect safety related equipment needed to get the plant to safe shutdown (SSD) or to limit the consequences of an accident. Specifically, the design of Point Beach did not ensure that the Residual Heat Removal (RHR) pumps would be protected from all credible non Category I (seismic) system failures. The licensee's corrective actions included an extensive internal flooding design review, which will result in an updated Final Safety Analysis Report (FSAR) with a more detailed description of the station's flooding licensing basis; modifications to multiple flood barriers to bring them into compliance with the licensee's flooding licensing basis; installation of additional flood level alarms where necessary, and evaluation or modification of service water (SW) piping to properly qualify it as seismic.

The inspectors determined that the finding was more than minor because it was associated with the Design Control attribute of the Mitigating System cornerstone and affected the cornerstone objective of ensuring the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the inadequate design resulted in an unanalyzed condition and loss of safety function of the RHR system while the plants were in Modes 4, 5, and 6, when relying on the RHR system for decay heat removal. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012. The inspectors answered "yes" to question 2 of the screening questions because the finding represented a loss of safety function. Thus the inspectors consulted the Region III Senior Risk Analysts (SRAs) who performed a detailed risk evaluation and determined that the finding was of very low safety significance (Green). The inspectors determined that the associated finding did not have a cross-cutting aspect because the finding was not reflective of current performance.

Inspection Report# : [2015003](#) (pdf)

Significance: G Sep 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Perform a Written Safety Evaluation for FSAR Changes

The inspectors identified a Severity Level IV NCV of 10 CFR 50.59(d)(1), “Changes, Tests, and Experiments,” and an associated finding of very low safety significance for the licensee’s failure to perform a safety evaluation to demonstrate that the removal of statements from the FSAR did not require a license amendment. Specifically, the licensee failed to perform a safety evaluation to determine whether removing an FSAR statement, which defined the RHR pump cubicle design flood height as seven feet, could be performed without a license amendment. The licensee entered the deficiency in their CAP as Action Request (AR) 02069425 by which the licensee intends on re-evaluating the 1996 FSAR change.

The inspectors determined that the finding was more than minor because the finding, if left uncorrected, would become a more significant safety concern. Specifically, inappropriately removing the information from the FSAR allowed the licensee to decrease the design basis flood protection height of the RHR compartments and significantly reduced the available time to isolate the leaking RHR pump seal. Violations of 10 CFR 50.59 are dispositioned using the traditional enforcement process instead of the SDP because they are considered to be violations that potentially impede or impact the regulatory process. In addition, the associated violation was determined to be more than minor because the inspectors could not reasonably determine that the changes would not have ultimately required NRC prior approval. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Initial Characterization of Findings,” dated June 19, 2012, and Appendix A, “The Significance Determination Process for Findings At-Power,” Exhibit 2, “Mitigating Systems Screening Questions,” dated June 19, 2012. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered “No” to the Mitigating Systems screening questions. The inspectors determined that the associated finding did not have a cross cutting aspect because the finding was not reflective of current performance.

Inspection Report# : [2015003](#) (pdf)

Significance: G Aug 28, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Evaluate Containment spray system for Potential Gas Intrusion (Section 1R17.1b)

Green. The inspectors identified a finding of very low safety significance, and an associated NCV of Title 10, Code of Federal Regulations, Part 50, Appendix B, Criterion III, “Design Control,” for the licensee’s failure to evaluate for potential gas intrusion from the spray additive tank into the containment spray (CS) system during the injection phase of a design-basis accident. As part of immediate corrective actions, the licensee entered the concern in the Corrective Action Process as AR 2068569, and performed an evaluation which determined no air entrainment is expected to occur during the injection phase.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems cornerstone attribute of equipment performance, and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, air intrusion into the CS system could affect the operability of the CS pumps by causing degraded performance and/or air binding of the pumps. The finding screened as having very low safety significance. Specifically, the finding was a deficiency affecting the design or qualification of a mitigating structure, system, or component (SSC), however, based on the evaluation performed by the licensee the SSC maintained its operability. Based on the timeframe of the violation the inspectors did not identify a cross-cutting aspect associated with this finding. (Section 1R17.1b)

Inspection Report# : [2015010](#) (pdf)

Significance: G Jul 10, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Demonstrate the Functionality of a Credited Safe Shutdown Component (Section 40A2.2b.(2))

The inspectors identified a finding of very low safety significance and an associated NCV of license condition 4.F for the licensee's failure to demonstrate the capabilities of systems needed to perform a design function for Appendix R cold shutdown. Specifically, none of the licensee's tests, inspections, or maintenance activities demonstrated that CC-722A, the component cooling water pump suction cross tie valve, was capable of being opened as required in AOP 10B, "Safe to Cold Shutdown in Local Control." The licensee corrective actions included entering the issue into their CA program, declaring CC-722A non functional, and commencing four-hour fire rounds.

The inspectors determined the finding to be more than minor because the failure to demonstrate the capabilities of systems needed to perform a design function for Appendix R safe shutdown was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). In accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding affected the ability to reach and maintain safe shutdown, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors screened the issue to Green under the Phase 1 Screening Question 1.3.1-A, because the inspectors determined that the finding would not prevent the reactor from reaching and maintaining hot shutdown. This finding has a cross-cutting aspect of Resolution (P.3), in the area of problem identification and resolution, because the licensee did not take effective corrective actions to address the issue in a timely manner. Specifically, in 2007, the licensee identified that they had not been testing the valve as specified in their Fire Protection Evaluation Report and as of July 2015 had still not corrected it. (Section 40A2b.(2))

Inspection Report# : [2015007](#) (pdf)

Barrier Integrity

Significance: G Jun 30, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

Fuel Assembly Move Sequence Planned Incorrectly

A finding of very low safety significance was identified by the inspectors, for the licensee's failure to follow procedure REI 26.0, "Fuel/Insert/Component Movement Planning." Specifically, the licensee failed to follow procedure REI 26.0, Step 5.5.7.b, which verified that the licensee would not place fuel assemblies with cooling times less than 295 days into spent fuel pool rack foot locations. The licensee's corrective actions included completing additional spent fuel moves, which placed the spent fuel pool into an appropriate configuration.

The inspectors determined that the finding was more than minor, because, if left uncorrected, it had the potential to become a more significant safety concern. Specifically, if the inspectors had not questioned the licensee about spent fuel pool rack foot locations, the spent fuel pool would have remained in an incorrect configuration. The inspectors concluded this finding was associated with the Barrier Integrity cornerstone. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment

0609.04, “Initial Characterization of Findings,” dated June 19, 2012, and Appendix L, “B.5.b Significance Determination Process”, “Table 2 – Significance Characterization,” The inspectors determined that the finding did not meet the criteria in Table 2 for a Greater Than Green significance; therefore, the finding was of very low safety significance (Green). This finding has a cross-cutting aspect of Avoid Complacency (H.12), in the area of Human Performance, for failing to implement appropriate error reduction tools. Specifically, the licensee became desensitized to overriding fuel placement constraints and failed to implement effective human performance tools to prevent the error

Inspection Report# : [2016002](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

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Miscellaneous

Last modified : August 29, 2016

Point Beach 2

3Q/2016 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Perform Required Fire Watches in Areas Containing Transient Combustibles

A finding of very low safety significance and associated NCV of license condition 4.F was identified by the inspectors for the licensee's failure to conduct required fire watch inspections in accordance with the licensee's Fire Protection Program requirements. Specifically, while conducting fire protection walkdowns of both unit's residual heat removal (RHR) pipeway and heat exchanger rooms, the inspectors discovered numerous transient combustible items in areas that the licensee had controlled using tamper seals on the entrances in lieu of physical entry. The licensee's corrective actions included documenting and quantifying the removal of the items from the zones and additional actions to perform additional evaluation of the fire zones.

The finding was determined to be more than minor because the failure to conduct the required fire watch inspections was associated with the Initiating Events cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). Specifically, the failure to conduct the required fire watch inspections or meet the alternate measures specified by the licensee's engineers, allowed unanalyzed transient combustibles and ignition sources to be present in fire zones that contained both trains of both unit's RHR pumps, heat exchangers and associated equipment. The inspectors determined the finding could be evaluated in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding degraded fire protection defense-in-depth strategies, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors screened the issue under the Phase 1 Screening Question 1.3.1-A, and determined that determined that the finding was of very low safety significance (Green), because the inspectors determined that the impact of a fire would not prevent either reactor from reaching and maintaining safe shutdown (hot). This finding has a cross-cutting aspect of Bases for Decisions (H.10), in the area of human performance, because the licensee's leadership did not ensure that the bases for operational and organizational decisions are communicated in a timely manner. Specifically, the licensee did not periodically verify the understanding of the individuals assigned to fire watches, in particular, that the relief from physical entry and application of a tamper seal required a thorough tour of the zones following any entry into those fire zones.

Inspection Report# : [2016002](#) (*pdf*)

Significance:  Jun 30, 2016

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Incorrectly Wiring Causes Transformer Lockout

A finding of very low safety significance and associated NCV's of TS 3.8.1, "AC Sources Operating" and TS 3.8.2, "AC Sources Shutdown," were self revealed for the licensee's failure to follow procedure RMP 9056-9B, "1X-03, Protective Relay Calibration and Testing." Specifically, a wiring error in the 1X-03 connection box, which occurred in 2013, caused the 1X-03 transformer's differential protection circuitry to lockout the transformer at current levels below the design protection values. The licensee's corrective actions included correcting the improper wiring in the

1X-03 connection box and evaluating other work performed by the same vendor during that timeframe. The inspectors determined that the finding was more than minor because it was associated with the Initiating Events cornerstone attribute of Equipment Performance and affected the cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the lockout of 1X-03 caused a loss of one of the licensee's offsite power lines and also caused a loss of power to multiple station battery chargers placing Unit 2 into limiting condition for operation (LCO) 3.0.3. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 1, Initiating Events Screening Questions, dated June 19, 2012. The inspectors answered "Yes" to the Support System Initiators question; therefore, a Detailed Risk Evaluation was required. Based on the conclusions in the Detailed Risk Evaluation, the SRA determined that the finding was of very low safety significance (Green). This finding has a cross-cutting aspect of Avoid Complacency (H.12), in the area of Human Performance, for failing to implement appropriate error reduction tools. Specifically, the incorrectly performed procedure step, in RMP 9056-9B, clearly specified which terminal point to land the wires on, the terminal points were clearly labeled, and the step required a concurrent verification; however, even with those barriers in place, the task performers still landed the wires on the wrong location.

Inspection Report# : [2016002](#) (*pdf*)

Significance:  Mar 31, 2016

Identified By: Self-Revealing

Item Type: FIN Finding

Failure to Follow Electrical Safety Procedures Results in Plant Transient

A finding of very low safety significance was self-revealed for the licensee's failure to follow electrical safety procedures when hanging danger tags on electrical components with exposed conductors. Specifically, danger tags were attached directly to the exposed energized portion of switchgear test switches, which exposed employees to an electrical hazard and contributed to the lockout of the 2X-01 main transformers and the subsequent Unit 2 plant transient. The licensee's corrective actions included a change to tagging procedures to include specific direction for tagging knife switches. The proposed changes included a prohibition for hanging tags on metal parts of the switches, and installing robust operational barriers using tags plus devices when danger tags are to be utilized.

The inspectors determined that the finding was more than minor because it was associated with the human performance attribute of the initiating events cornerstone, and adversely affected the cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the failure to use insulated tools on exposed electrical equipment greater than 50 volts presented an electrical injury hazard and actually resulted in a plant transient for Unit 2, which included lifting of a pressurizer power-operated relief valve (PORV), loss of forced reactor coolant system (RCS) flow, and actuation of the auxiliary feedwater (AFW) system. The inspectors determined the finding could be evaluated in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, because Unit 2 was in mode 3 at the time of the event. Additionally, Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 1, "Initiating Events Screening Questions," dated June 19, 2012 applied. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Transient Initiators screening question. This finding has a cross-cutting aspect of Resources (H.1), in the area of Human Performance for failing to ensure that personnel, equipment procedures and other resources were available and adequate to support nuclear safety. Specifically, the licensee failed to ensure that employees had all necessary tools, direction, and supervision to support successful work performance.

Inspection Report# : [2016001](#) (*pdf*)

Mitigating Systems

Significance: G Jun 30, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

Submerged Safety-Related Emergency Diesel Generator Fuel Oil Transfer Pump Cables

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” was identified by the inspectors, for the failure to maintain emergency diesel generator (EDG) fuel oil transfer pump safety-related cables in an environment for which they were designed. Specifically, the licensee allowed the safety-related cables to be submerged in water, which was outside of their design, in manhole Z-066B. The licensee’s corrective actions included pumping the water out of the manholes, repairing the failed sump pump, level switch, and alarm circuit; and performing an engineering evaluation to quantify the level of degradation as a result of the submergence.

The performance deficiency was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Initial Characterization of Findings,” issued on June 19, 2012. Specifically, the inspectors used IMC 0609 Appendix A “SDP for Findings At-Power,” issued June 19, 2012, Exhibit 2, “Mitigating Systems Screening Questions” to screen the finding. The finding screened as of very low safety significance (Green) because the inspectors answered "Yes" to the question “does the SSC maintain its operability or functionality.” Specifically, the submergence of the G-01 and G-02 EDG fuel oil transfer pump cables did not render the transfer pumps inoperable. This finding has a cross-cutting aspect Evaluation (P.2) in the area of problem identification and resolution, because the licensee did not thoroughly evaluate problems to ensure that resolutions address causes and extent of conditions, commensurate with their safety significance. Specifically the licensee failed to thoroughly investigate and prioritize the failure of the manhole alarm and pumping system according to the safety significance of the cables contained within the manholes which led to prolonged and unevaluated submergence of the cables.

Inspection Report# : [2016002](#) (*pdf*)

Significance: G Dec 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Follow Fire Protection Program Requirements for Care, Use and Maintenance of Fire Hose

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of license condition 4.F for the licensee’s failure to have procedures or instructions to prevent firefighting booster hoses from being kinked and/or twisted on hose reels. Specifically, booster hoses were installed on hose reels in both unit’s containments and in the turbine building (TB), which were twisted and kinked. The licensee’s corrective actions included rewinding hoses in the Unit 2 containment, four hoses in the TB, and creating compensatory measures for hose reels for the Unit 1 containment.

The finding was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. Specifically, the licensee failed to ensure that activities such as inspection, testing, and maintenance of fire protection systems were prescribed and accomplished in accordance with documented instructions, procedures, and drawings. In accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Initial Characterization of Findings,” Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding degraded fire protection defense-in-depth strategies, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, “Fire Protection Significance Determination Process.” The inspectors screened the issue to Green under the Phase 1 Screening Question 1.3.1-A, because the inspectors determined that the impact of a fire would be limited to one

train/division of equipment for the affected fire areas and at least one credited safe shutdown path would be unaffected. This finding has a cross-cutting aspect of Training (H.9), in the area of human performance, because the licensee did not provide training and ensure knowledge transfer to maintain a knowledgeable, technically competent workforce, and instill nuclear safety values. Specifically, the inspectors determined that operations personnel were not adequately trained to recognize deficiencies associated with firefighting equipment standards, such as kinked and twisted hoses on hose reels, and subsequently failed to initiate actions to remedy such conditions.

Inspection Report# : [2015004](#) (pdf)

Significance:  Dec 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Inadequate Evaluation of Non-Conforming Auxiliary Feedwater System Pipe Defects

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to maintain a Unit 2 auxiliary feedwater system (AFW) pipe segment containing linear defects in accordance with the design and material specifications. As a corrective action, the licensee performed light filing to remove the defects from this pipe segment. The licensee entered the failure to maintain the AFW pipe segment in accordance with the design into the corrective action program (CAP) as action request (AR) 02084077, and was evaluating additional corrective actions.

This finding was determined to be more than minor in accordance with IMC 0612, Appendix B, because if left uncorrected the performance deficiency had the potential to lead to a more significant safety concern. Specifically, the licensee's failure to maintain the Unit 2 AFW pipe segment containing linear defects in accordance with the design and material specifications could result in an increase in the possibility of pipe leakage or failure. In addition, the failure to maintain the AFW pipe segment containing linear defects in accordance with the design and material specification adversely affected the Mitigating System Cornerstone attribute of Equipment Performance because it could result in failure of AFW piping which would reduce the availability and reliability of the this mitigating system. The inspectors evaluated the finding in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," and Exhibit 2, "Mitigating Systems Screening Questions," of IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power." The inspectors answered "Yes" to screening question A.1 of Exhibit 2. Although this finding adversely affected the design or qualification of the AFW pipe segments, the finding screened as very low safety significance (Green), because it did not result in the loss of operability or functionality of the affected pipe segment. This finding has a cross cutting aspect in the Teamwork (H.4) component of the human performance cross cutting area. Specifically, the licensee's Projects Team responsible for the AFW modifications did not effectively communicate and coordinate with the licensee's Programs Engineering Group for resolution of the AFW pipe nonconforming conditions to ensure nuclear safety was maintained.

Inspection Report# : [2015004](#) (pdf)

Barrier Integrity

Significance:  Jun 30, 2016

Identified By: NRC

Item Type: FIN Finding

Fuel Assembly Move Sequence Planned Incorrectly

A finding of very low safety significance was identified by the inspectors, for the licensee's failure to follow procedure REI 26.0, "Fuel/Insert/Component Movement Planning." Specifically, the licensee failed to follow procedure REI 26.0, Step 5.5.7.b, which verified that the licensee would not place fuel assemblies with cooling times less than 295 days into spent fuel pool rack foot locations. The licensee's corrective actions included completing additional spent fuel moves, which placed the spent fuel pool into an appropriate configuration.

The inspectors determined that the finding was more than minor, because, if left uncorrected, it had the potential to become a more significant safety concern. Specifically, if the inspectors had not questioned the licensee about spent fuel pool rack foot locations, the spent fuel pool would have remained in an incorrect configuration. The inspectors concluded this finding was associated with the Barrier Integrity cornerstone. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix L, "B.5.b Significance Determination Process", "Table 2 – Significance Characterization," The inspectors determined that the finding did not meet the criteria in Table 2 for a Greater Than Green significance; therefore, the finding was of very low safety significance (Green). This finding has a cross-cutting aspect of Avoid Complacency (H.12), in the area of Human Performance, for failing to implement appropriate error reduction tools. Specifically, the licensee became desensitized to overriding fuel placement constraints and failed to implement effective human performance tools to prevent the error

Inspection Report# : [2016002](#) (pdf)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : December 08, 2016

Point Beach 2

4Q/2016 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Perform Required Fire Watches in Areas Containing Transient Combustibles

A finding of very low safety significance and associated NCV of license condition 4.F was identified by the inspectors for the licensee's failure to conduct required fire watch inspections in accordance with the licensee's Fire Protection Program requirements. Specifically, while conducting fire protection walkdowns of both unit's residual heat removal (RHR) pipeway and heat exchanger rooms, the inspectors discovered numerous transient combustible items in areas that the licensee had controlled using tamper seals on the entrances in lieu of physical entry. The licensee's corrective actions included documenting and quantifying the removal of the items from the zones and additional actions to perform additional evaluation of the fire zones.

The finding was determined to be more than minor because the failure to conduct the required fire watch inspections was associated with the Initiating Events cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). Specifically, the failure to conduct the required fire watch inspections or meet the alternate measures specified by the licensee's engineers, allowed unanalyzed transient combustibles and ignition sources to be present in fire zones that contained both trains of both unit's RHR pumps, heat exchangers and associated equipment. The inspectors determined the finding could be evaluated in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding degraded fire protection defense-in-depth strategies, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors screened the issue under the Phase 1 Screening Question 1.3.1-A, and determined that determined that the finding was of very low safety significance (Green), because the inspectors determined that the impact of a fire would not prevent either reactor from reaching and maintaining safe shutdown (hot). This finding has a cross-cutting aspect of Bases for Decisions (H.10), in the area of human performance, because the licensee's leadership did not ensure that the bases for operational and organizational decisions are communicated in a timely manner. Specifically, the licensee did not periodically verify the understanding of the individuals assigned to fire watches, in particular, that the relief from physical entry and application of a tamper seal required a thorough tour of the zones following any entry into those fire zones.

Inspection Report# : [2016002](#) (*pdf*)

Significance:  Jun 30, 2016

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Incorrectly Wiring Causes Transformer Lockout

A finding of very low safety significance and associated NCV's of TS 3.8.1, "AC Sources Operating" and TS 3.8.2, "AC Sources Shutdown," were self revealed for the licensee's failure to follow procedure RMP 9056-9B, "1X-03, Protective Relay Calibration and Testing." Specifically, a wiring error in the 1X-03 connection box, which occurred in 2013, caused the 1X-03 transformer's differential protection circuitry to lockout the transformer at current levels below the design protection values. The licensee's corrective actions included correcting the improper wiring in the

1X-03 connection box and evaluating other work performed by the same vendor during that timeframe. The inspectors determined that the finding was more than minor because it was associated with the Initiating Events cornerstone attribute of Equipment Performance and affected the cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the lockout of 1X-03 caused a loss of one of the licensee's offsite power lines and also caused a loss of power to multiple station battery chargers placing Unit 2 into limiting condition for operation (LCO) 3.0.3. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 1, Initiating Events Screening Questions, dated June 19, 2012. The inspectors answered "Yes" to the Support System Initiators question; therefore, a Detailed Risk Evaluation was required. Based on the conclusions in the Detailed Risk Evaluation, the SRA determined that the finding was of very low safety significance (Green). This finding has a cross-cutting aspect of Avoid Complacency (H.12), in the area of Human Performance, for failing to implement appropriate error reduction tools. Specifically, the incorrectly performed procedure step, in RMP 9056-9B, clearly specified which terminal point to land the wires on, the terminal points were clearly labeled, and the step required a concurrent verification; however, even with those barriers in place, the task performers still landed the wires on the wrong location.

Inspection Report# : [2016002](#) (*pdf*)

Significance:  Mar 31, 2016

Identified By: Self-Revealing

Item Type: FIN Finding

Failure to Follow Electrical Safety Procedures Results in Plant Transient

A finding of very low safety significance was self-revealed for the licensee's failure to follow electrical safety procedures when hanging danger tags on electrical components with exposed conductors. Specifically, danger tags were attached directly to the exposed energized portion of switchgear test switches, which exposed employees to an electrical hazard and contributed to the lockout of the 2X-01 main transformers and the subsequent Unit 2 plant transient. The licensee's corrective actions included a change to tagging procedures to include specific direction for tagging knife switches. The proposed changes included a prohibition for hanging tags on metal parts of the switches, and installing robust operational barriers using tags plus devices when danger tags are to be utilized.

The inspectors determined that the finding was more than minor because it was associated with the human performance attribute of the initiating events cornerstone, and adversely affected the cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the failure to use insulated tools on exposed electrical equipment greater than 50 volts presented an electrical injury hazard and actually resulted in a plant transient for Unit 2, which included lifting of a pressurizer power-operated relief valve (PORV), loss of forced reactor coolant system (RCS) flow, and actuation of the auxiliary feedwater (AFW) system. The inspectors determined the finding could be evaluated in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, because Unit 2 was in mode 3 at the time of the event. Additionally, Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 1, "Initiating Events Screening Questions," dated June 19, 2012 applied. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered "No" to the Transient Initiators screening question. This finding has a cross-cutting aspect of Resources (H.1), in the area of Human Performance for failing to ensure that personnel, equipment procedures and other resources were available and adequate to support nuclear safety. Specifically, the licensee failed to ensure that employees had all necessary tools, direction, and supervision to support successful work performance.

Inspection Report# : [2016001](#) (*pdf*)

Mitigating Systems

Significance:  Jun 30, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

Submerged Safety-Related Emergency Diesel Generator Fuel Oil Transfer Pump Cables

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” was identified by the inspectors, for the failure to maintain emergency diesel generator (EDG) fuel oil transfer pump safety-related cables in an environment for which they were designed. Specifically, the licensee allowed the safety-related cables to be submerged in water, which was outside of their design, in manhole Z-066B. The licensee’s corrective actions included pumping the water out of the manholes, repairing the failed sump pump, level switch, and alarm circuit; and performing an engineering evaluation to quantify the level of degradation as a result of the submergence.

The performance deficiency was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Initial Characterization of Findings,” issued on June 19, 2012. Specifically, the inspectors used IMC 0609 Appendix A “SDP for Findings At-Power,” issued June 19, 2012, Exhibit 2, “Mitigating Systems Screening Questions” to screen the finding. The finding screened as of very low safety significance (Green) because the inspectors answered “Yes” to the question “does the SSC maintain its operability or functionality.” Specifically, the submergence of the G-01 and G-02 EDG fuel oil transfer pump cables did not render the transfer pumps inoperable. This finding has a cross-cutting aspect Evaluation (P.2) in the area of problem identification and resolution, because the licensee did not thoroughly evaluate problems to ensure that resolutions address causes and extent of conditions, commensurate with their safety significance. Specifically the licensee failed to thoroughly investigate and prioritize the failure of the manhole alarm and pumping system according to the safety significance of the cables contained within the manholes which led to prolonged and unevaluated submergence of the cables.

Inspection Report# : [2016002](#) (pdf)

Barrier Integrity

Significance:  Jun 30, 2016

Identified By: NRC

Item Type: FIN Finding

Fuel Assembly Move Sequence Planned Incorrectly

A finding of very low safety significance was identified by the inspectors, for the licensee’s failure to follow procedure REI 26.0, “Fuel/Insert/Component Movement Planning.” Specifically, the licensee failed to follow procedure REI 26.0, Step 5.5.7.b, which verified that the licensee would not place fuel assemblies with cooling times less than 295 days into spent fuel pool rack foot locations. The licensee’s corrective actions included completing additional spent fuel moves, which placed the spent fuel pool into an appropriate configuration.

The inspectors determined that the finding was more than minor, because, if left uncorrected, it had the potential to become a more significant safety concern. Specifically, if the inspectors had not questioned the licensee about spent fuel pool rack foot locations, the spent fuel pool would have remained in an incorrect configuration. The inspectors concluded this finding was associated with the Barrier Integrity cornerstone. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Initial Characterization of Findings,” dated June 19, 2012, and Appendix L, “B.5.b Significance Determination Process”, “Table 2 – Significance Characterization,” The inspectors determined that the finding did not meet the criteria in Table 2 for a Greater Than Green significance; therefore, the finding was of very low safety

significance (Green). This finding has a cross-cutting aspect of Avoid Complacency (H.12), in the area of Human Performance, for failing to implement appropriate error reduction tools. Specifically, the licensee became desensitized to overriding fuel placement constraints and failed to implement effective human performance tools to prevent the error

Inspection Report# : [2016002](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : February 01, 2017



Home > Nuclear Reactors > Operating Reactors > Reactor Oversight Process > Plant Summaries > Point Beach 2 > Quarterly Plant Inspection Findings

Point Beach 2 – Quarterly Plant Inspection Findings

2Q/2017 – Plant Inspection Findings

On this page:

- Initiating Events
- Mitigating Systems
- Barrier Integrity
- Emergency Preparedness
- Occupational Radiation Safety
- Public Radiation Safety
- Security

Initiating Events

Mitigating Systems

Significance: G Dec 31, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

Scaffolding Constructed Without Required Engineering Approvals

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by inspectors for the licensee failing to follow step 4.1.3 (2) of procedure MA AA-100-1002, "Scaffold Installation, Modification, and Removal Requests." Specifically, the licensee failed to obtain and document engineering approval for multiple scaffolds constructed in the cable spreading room that did not meet the separation criteria of Attachment 1 of MA-AA-100-1002. The licensee's short term corrective actions included obtaining the appropriate engineering evaluations for the affected scaffolding and conducting a stand-down and information sharing with the scaffold builders to ensure they were aware of the importance obtaining engineering approvals.

The finding was determined to be more than minor because the finding, if left uncorrected, had the potential to become a more significant safety concern. Specifically, if the licensee continued to construct scaffolding without obtaining required engineering approvals, scaffolding could be constructed that was not seismically qualified and adversely affected the operability of surrounding SSCs. The inspectors concluded this finding was associated with the Mitigating Systems Cornerstone. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," issued on June 19, 2012. Specifically, the inspectors used IMC 0609 Appendix A "SDP for Findings At-Power," issued June 19, 2012, Exhibit 2, "Mitigating Systems Screening Questions" to screen the finding. The finding screened as of very low safety significance (Green) because the inspectors answered "No" to the screening questions. This finding has a cross-cutting aspect of Teamwork (H.4), in the area of Human Performance, for the failure of individuals and work groups to communicate and coordinate their activities across organizational boundaries to ensure nuclear safety is maintained. Specifically, the scaffold building team failed to communicate with the engineering organization to ensure the

engineering evaluations were complete.

Inspection Report# : 2016004 (*pdf*)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

The security cornerstone is an important component of the ROP, which includes various security inspection activities the NRC uses to verify licensee compliance with Commission regulations and thus ensure public health and safety. The Commission determined in the staff requirements memorandum (SRM) for SECY-04-0191, "Withholding Sensitive Unclassified Information Concerning Nuclear Power Reactors from Public Disclosure," dated November 9, 2004, that specific information related to findings and performance indicators associated with the security cornerstone will not be publicly available to ensure that security-related information is not provided to a possible adversary. Security inspection report cover letters will be available on the NRC Web site; however, security-related information on the details of inspection finding(s) will not be displayed.

Miscellaneous

Current data as of : August 03, 2017

Page Last Reviewed/Updated Wednesday, August 10, 2016



Home > Nuclear Reactors > Operating Reactors > Reactor Oversight Process > Plant Summaries > Point Beach 2 > Quarterly Plant Inspection Findings

Point Beach 2 – Quarterly Plant Inspection Findings

2Q/2017 – Plant Inspection Findings

On this page:

- Initiating Events
- Mitigating Systems
- Barrier Integrity
- Emergency Preparedness
- Occupational Radiation Safety
- Public Radiation Safety
- Security

Initiating Events

Mitigating Systems

Significance: G Jun 30, 2017

Identified By: Self-Revealing

Item Type: FIN Finding

Failure to Evaluate Operating Experience

A finding of very low safety significance was self-revealed for the failure to follow program description PI-AA-102, "Operating Experience Program," Revision 3. Specifically, the licensee failed to evaluate operating experience that applied to Point Beach that identified the potential for cable connectors to disconnect due to machine vibration. PI-AA-102, Section 5, Instructions, Step 5.1(3), Screening Operating Experience Items, states, "If the initial screening indicates potential applicability to a NextEra Energy nuclear plant, program (including corporate administered programs), policy, process, or procedure; then an evaluation is conducted." Subsequently, a disconnected magnetic speed sensor cable on the G-04 emergency diesel generator caused a failure during a surveillance run attempt. The licensee's short term corrective actions included reconnecting the G-04 EDG magnetic speed sensor cable and installing lock-wire to prevent the connector from unintentionally disconnecting. The licensee's long-term corrective actions included changing their maintenance procedures to check connector tightness on the diesels periodically.

The inspectors determined that the failure to evaluate the external operating experience was contrary to licensee program description PI-AA-102 and was a performance deficiency. The finding was determined to be more than minor because the failure to evaluate operating experience was associated with the Mitigating Systems cornerstone attribute of Equipment Reliability and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). The inspectors applied IMC 0609, Attachment 4, "Initial Characterization of Findings," issued October 7, 2016, to this finding. The inspectors answered "Yes" to question A within Table 3, "Significance Determination Process Appendix Router," and transitioned to IMC 0609, Appendix G, Attachment 1, "Shutdown Operations Significance Determination Process Phase 1 Initial Screening and Characterization of Findings," dated May 9, 2014. The inspectors referenced

Exhibit 3 - Mitigating Systems Screening Questions. The finding screened as of very low safety significance (Green) because the inspectors answered "No" to the screening questions. The inspectors did not identify a cross-cutting aspect. The cause of the finding occurred in 2012 and was not reflective of present performance.
Inspection Report# : 2017002 (*pdf*)

Significance:  Dec 31, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

Scaffolding Constructed Without Required Engineering Approvals

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by inspectors for the licensee failing to follow step 4.1.3 (2) of procedure MA AA-100-1002, "Scaffold Installation, Modification, and Removal Requests." Specifically, the licensee failed to obtain and document engineering approval for multiple scaffolds constructed in the cable spreading room that did not meet the separation criteria of Attachment 1 of MA-AA-100-1002. The licensee's short term corrective actions included obtaining the appropriate engineering evaluations for the affected scaffolding and conducting a stand-down and information sharing with the scaffold builders to ensure they were aware of the importance obtaining engineering approvals.

The finding was determined to be more than minor because the finding, if left uncorrected, had the potential to become a more significant safety concern. Specifically, if the licensee continued to construct scaffolding without obtaining required engineering approvals, scaffolding could be constructed that was not seismically qualified and adversely affected the operability of surrounding SSCs. The inspectors concluded this finding was associated with the Mitigating Systems Cornerstone. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," issued on June 19, 2012. Specifically, the inspectors used IMC 0609 Appendix A "SDP for Findings At-Power," issued June 19, 2012, Exhibit 2, "Mitigating Systems Screening Questions" to screen the finding. The finding screened as of very low safety significance (Green) because the inspectors answered "No" to the screening questions. This finding has a cross-cutting aspect of Teamwork (H.4), in the area of Human Performance, for the failure of individuals and work groups to communicate and coordinate their activities across organizational boundaries to ensure nuclear safety is maintained. Specifically, the scaffold building team failed to communicate with the engineering organization to ensure the engineering evaluations were complete.

Inspection Report# : 2016004 (*pdf*)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

The security cornerstone is an important component of the ROP, which includes various security inspection activities the NRC uses to verify licensee compliance with Commission regulations and thus ensure public health and safety. The Commission determined in the staff requirements memorandum (SRM) for SECY-04-0191, "Withholding Sensitive Unclassified Information Concerning Nuclear Power Reactors from Public Disclosure," dated November 9, 2004, that specific information related to findings and performance indicators associated with the security cornerstone will not be publicly available to ensure that security-related information is not provided to a possible adversary. Security inspection report cover letters will be available on the NRC Web site; however, security-related information on the details of inspection finding(s) will not be displayed.

Miscellaneous

Current data as of : September 05, 2017

Page Last Reviewed/Updated Wednesday, June 07, 2017



Home > Nuclear Reactors > Operating Reactors > Reactor Oversight Process > Plant Summaries > Point Beach 2 > Quarterly Plant Inspection Findings

Point Beach 2 – Quarterly Plant Inspection Findings

3Q/2017 – Plant Inspection Findings

On this page:

- Initiating Events
- Mitigating Systems
- Barrier Integrity
- Emergency Preparedness
- Occupational Radiation Safety
- Public Radiation Safety
- Security

Initiating Events

Significance: G Jul 14, 2017

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Identify Non-Conforming Conditions after Receipt of Anchor Darling Double Disc Gate Valve Related Part 21 Report

Green. The inspectors identified a finding of very-low safety significance (Green), and an associated (NCV) of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to identify a condition adverse to quality. Specifically, after receiving and reviewing the Flowserve 10 CFR Part 21 report, the licensee misunderstood the information provided and failed to identify 36 safety-related valves that were nonconforming. Of these 36 valves, 14 were identified as being susceptible to pin failure based on their torque setting, 6 of which had open or close safety functions. The licensee captured the inspectors concern in the CAP as AR 02212531, and AR 02212915. In addition, the licensee performed operability evaluations that concluded the affected valves remained operable.

The performance deficiency was more-than-minor because it was associated with the equipment performance attribute of the Mitigating System and Initiating Event cornerstones, and adversely affected the cornerstone individual objectives. Using IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the finding screened as of very-low safety significance (Green) by answering "No" to the questions contained in Exhibit 1, and in accordance with Exhibit 2, it did not result in the loss of operability or functionality of mitigating systems. The team did not identify a cross-cutting aspect associated with this finding because the most significant cause for the error was not reflective of current performance. Specifically, the Part 21 report and associated review by the licensee occurred in February 2013. (Section 1R21.5.b(1))

Inspection Report# : 2017007 (*pdf*)

Mitigating Systems

Significance:  Jul 14, 2017

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Correct a Condition Adverse to Quality Associated with a Seismic Interaction of the Motor Driven Auxiliary Feedwater Piping

Green. The NRC identified a finding of very-low safety significance (Green) and an associated NCV of Title 10, Code of Federal Regulations (CFR), Part 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee failure to correct a Condition Adverse to Quality (CAQ) associated with a seismic piping interaction affecting the Motor Driven Auxiliary Feedwater (MDAFW) system. Specifically, the licensee identified a flange clearance to the Unit 1 MDAFW suction piping was nonconforming and captured it in the Corrective Action Program (CAP) as Action Request (AR) 01684524. However, the licensee closed the AR without correcting the CAQ. The licensee captured the inspectors concern in the CAP as AR 02212810 and performed an evaluation that reasonably concluded the MDAFW remained operable.

The performance deficiency was determined to be more-than-minor because it was associated with the Mitigating Systems cornerstone attribute of protection against external factors and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding screened as of very-low safety significance (Green) because it did not result in the loss of operability or functionality of mitigating systems. Specifically, the licensee performed an operability determination which concluded the stresses resulting from the seismic interaction would reasonably be bounded by the applicable stress operability limits. The team did not identify a cross cutting aspect associated with this finding because it was not confirmed to reflect current performance because the performance deficiency occurred more than 3 years ago. Specifically, the licensee closed AR 01684524 without correcting this CAQ on September 20, 2011. (Section 1R21.3.b (1))

Inspection Report# : 2017007 (*pdf*)

Significance:  Jun 30, 2017

Identified By: Self-Revealing

Item Type: FIN Finding

Failure to Evaluate Operating Experience

A finding of very low safety significance was self-revealed for the failure to follow program description PI-AA-102, "Operating Experience Program," Revision 3. Specifically, the licensee failed to evaluate operating experience that applied to Point Beach that identified the potential for cable connectors to disconnect due to machine vibration. PI-AA-102, Section 5, Instructions, Step 5.1(3), Screening Operating Experience Items, states, "If the initial screening indicates potential applicability to a NextEra Energy nuclear plant, program (including corporate administered programs), policy, process, or procedure; then an evaluation is conducted." Subsequently, a disconnected magnetic speed sensor cable on the G-04 emergency diesel generator caused a failure during a surveillance run attempt. The licensee's short term corrective actions included reconnecting the G-04 EDG magnetic speed sensor cable and installing lock-wire to prevent the connector from unintentionally disconnecting. The licensee's long-term corrective actions included changing their maintenance procedures to check connector tightness on the diesels periodically.

The inspectors determined that the failure to evaluate the external operating experience was contrary to licensee program description PI-AA-102 and was a performance deficiency. The finding was determined to be more than minor because the failure to evaluate operating experience was associated with the Mitigating Systems cornerstone attribute of Equipment Reliability and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). The inspectors applied IMC 0609, Attachment 4, "Initial Characterization of Findings," issued October 7, 2016, to this

finding. The inspectors answered "Yes" to question A within Table 3, "Significance Determination Process Appendix Router," and transitioned to IMC 0609, Appendix G, Attachment 1, "Shutdown Operations Significance Determination Process Phase 1 Initial Screening and Characterization of Findings," dated May 9, 2014. The inspectors referenced Exhibit 3 - Mitigating Systems Screening Questions. The finding screened as of very low safety significance (Green) because the inspectors answered "No" to the screening questions. The inspectors did not identify a cross-cutting aspect. The cause of the finding occurred in 2012 and was not reflective of present performance.

Inspection Report# : 2017002 (*pdf*)

Significance:  Dec 31, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

Scaffolding Constructed Without Required Engineering Approvals

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by inspectors for the licensee failing to follow step 4.1.3 (2) of procedure MA AA-100-1002, "Scaffold Installation, Modification, and Removal Requests." Specifically, the licensee failed to obtain and document engineering approval for multiple scaffolds constructed in the cable spreading room that did not meet the separation criteria of Attachment 1 of MA-AA-100-1002. The licensee's short term corrective actions included obtaining the appropriate engineering evaluations for the affected scaffolding and conducting a stand-down and information sharing with the scaffold builders to ensure they were aware of the importance obtaining engineering approvals.

The finding was determined to be more than minor because the finding, if left uncorrected, had the potential to become a more significant safety concern. Specifically, if the licensee continued to construct scaffolding without obtaining required engineering approvals, scaffolding could be constructed that was not seismically qualified and adversely affected the operability of surrounding SSCs. The inspectors concluded this finding was associated with the Mitigating Systems Cornerstone. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," issued on June 19, 2012. Specifically, the inspectors used IMC 0609 Appendix A "SDP for Findings At-Power," issued June 19, 2012, Exhibit 2, "Mitigating Systems Screening Questions" to screen the finding. The finding screened as of very low safety significance (Green) because the inspectors answered "No" to the screening questions. This finding has a cross-cutting aspect of Teamwork (H.4), in the area of Human Performance, for the failure of individuals and work groups to communicate and coordinate their activities across organizational boundaries to ensure nuclear safety is maintained. Specifically, the scaffold building team failed to communicate with the engineering organization to ensure the engineering evaluations were complete.

Inspection Report# : 2016004 (*pdf*)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

The security cornerstone is an important component of the ROP, which includes various security inspection activities the NRC uses to verify licensee compliance with Commission regulations and thus ensure public health and safety. The Commission determined in the staff requirements memorandum (SRM) for SECY-04-0191, "Withholding Sensitive Unclassified Information Concerning Nuclear Power Reactors from Public Disclosure," dated November 9, 2004, that specific information related to findings and performance indicators associated with the security cornerstone will not be publicly available to ensure that security-related information is not provided to a possible adversary. Security inspection report cover letters will be available on the NRC Web site; however, security-related information on the details of inspection finding(s) will not be displayed.

Miscellaneous

Current data as of : November 29, 2017

Page Last Reviewed/Updated Monday, November 06, 2017



Home > Nuclear Reactors > Operating Reactors > Reactor Oversight Process > Plant Summaries > Point Beach 2 > Quarterly Plant Inspection Findings

Point Beach 2 – Quarterly Plant Inspection Findings

4Q/2017 – Plant Inspection Findings

On this page:

- Initiating Events
- Mitigating Systems
- Barrier Integrity
- Emergency Preparedness
- Occupational Radiation Safety
- Public Radiation Safety
- Security

Initiating Events

Significance: G Jul 14, 2017

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Identify Non-Conforming Conditions after Receipt of Anchor Darling Double Disc Gate Valve Related Part 21 Report

Green. The inspectors identified a finding of very-low safety significance (Green), and an associated (NCV) of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to identify a condition adverse to quality. Specifically, after receiving and reviewing the Flowserve 10 CFR Part 21 report, the licensee misunderstood the information provided and failed to identify 36 safety-related valves that were nonconforming. Of these 36 valves, 14 were identified as being susceptible to pin failure based on their torque setting, 6 of which had open or close safety functions. The licensee captured the inspectors concern in the CAP as AR 02212531, and AR 02212915. In addition, the licensee performed operability evaluations that concluded the affected valves remained operable.

The performance deficiency was more-than-minor because it was associated with the equipment performance attribute of the Mitigating System and Initiating Event cornerstones, and adversely affected the cornerstone individual objectives. Using IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the finding screened as of very-low safety significance (Green) by answering "No" to the questions contained in Exhibit 1, and in accordance with Exhibit 2, it did not result in the loss of operability or functionality of mitigating systems. The team did not identify a cross-cutting aspect associated with this finding because the most significant cause for the error was not reflective of current performance. Specifically, the Part 21 report and associated review by the licensee occurred in February 2013. (Section 1R21.5.b(1))

Inspection Report# : 2017007 (*pdf*)

Mitigating Systems

Significance:  Nov 08, 2017

Identified By: NRC

Item Type: NCV Non-Cited Violation

NCV 05000266/2017003-01; 05000301/2017003-01; Inappropriate Instructions for Testing Safety-Related Power Supplies

A finding of very low safety significance and associated NCV of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the failure to have instructions of a type appropriate to the circumstances. Specifically, the instructions for testing a refurbished safety-related power supply did not contain acceptance criteria to ensure that the power supply voltage output did not exceed the maximum voltage requirements established by the vendor of the downstream level transmitter. Immediate corrective actions included evaluating the voltage output of operating power supplies to ensure the voltage at their associated transmitters was within vendor specifications.

The finding was determined to be more than minor because the finding, if left uncorrected, had the potential to lead to a more significant safety concern. Specifically, power supplies could have been placed back in service producing voltage levels at the downstream safety-related transmitters exceeding their vendor requirements. The inspectors concluded this finding was associated with the Mitigating Systems Cornerstone. The inspectors determined the finding could be evaluated using the Significance Determination Process (SDP) in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," issued on October 7, 2016. Specifically, the inspectors used IMC 0609 Appendix A "SDP for Findings At-Power," issued June 19, 2012, Exhibit 2, "Mitigating Systems Screening Questions" to screen the finding. The finding screened as of very low safety significance (Green) because the inspectors answered "No" to the screening questions. This finding has a cross-cutting aspect in the area of human performance, Design Margins, because the licensee did not ensure that design margins were carefully guarded.

[H.6] (Section 1R19)

Inspection Report# : 2017003 (*pdf*)

Significance:  Nov 08, 2017

Identified By: NRC

Item Type: NCV Non-Cited Violation

NCV 05000266/2017003-02; 05000301/2017003-02; Service Water Cable Support Failure

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified by the inspectors for the failure to promptly identify and correct degraded structural supports for safety-related cables, a condition adverse to quality. Specifically, the licensee failed to repair or replace degraded service water pump cable supports after they identified the degraded supports in 2011. The licensee was in the process of scheduling the cable support repairs at the end of the inspection period. The inspectors determined that the continued non-compliance does not present an immediate safety concern because, given the weight pressing onto the cables, the insulation should remain intact.

The finding was determined to be more than minor because the finding was associated with the Mitigating Systems cornerstone attribute of Reliability and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the failure of the service water motor cable support allowed the structural beam to drop and metal cable clamps to impinge on the insulation of the 480 volt safety-related cables. The inspectors determined the finding could be evaluated in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," issued on October 7, 2016. Specifically, the inspectors used IMC 0609 Appendix A "SDP for Findings At-Power," issued June 19, 2012, Exhibit 2, "Mitigating Systems Screening Questions" to screen the finding. The finding screened as of very low safety significance (Green) because the inspectors answered "No" to the screening questions. This finding has a cross-cutting aspect in the area of human performance, Conservative Bias, because the licensee did not use decision making-practices that emphasize prudent choices over those that are simply allowed. [H.14] (Section 40A2)

Inspection Report# : 2017003 (*pdf*)

Significance:  Jul 14, 2017

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Correct a Condition Adverse to Quality Associated with a Seismic Interaction of the Motor Driven Auxiliary Feedwater Piping

Green. The NRC identified a finding of very-low safety significance (Green) and an associated NCV of Title 10, Code of Federal Regulations (CFR), Part 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee failure to correct a Condition Adverse to Quality (CAQ) associated with a seismic piping interaction affecting the Motor Driven Auxiliary Feedwater (MDAFW) system. Specifically, the licensee identified a flange clearance to the Unit 1 MDAFW suction piping was nonconforming and captured it in the Corrective Action Program (CAP) as Action Request (AR) 01684524. However, the licensee closed the AR without correcting the CAQ. The licensee captured the inspectors concern in the CAP as AR 02212810 and performed an evaluation that reasonably concluded the MDAFW remained operable.

The performance deficiency was determined to be more-than-minor because it was associated with the Mitigating Systems cornerstone attribute of protection against external factors and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding screened as of very-low safety significance (Green) because it did not result in the loss of operability or functionality of mitigating systems. Specifically, the licensee performed an operability determination which concluded the stresses resulting from the seismic interaction would reasonably be bounded by the applicable stress operability limits. The team did not identify a cross cutting aspect associated with this finding because it was not confirmed to reflect current performance because the performance deficiency occurred more than 3 years ago. Specifically, the licensee closed AR 01684524 without correcting this CAQ on September 20, 2011. (Section 1R21.3.b (1))

Inspection Report# : 2017007 (*pdf*)

Significance:  Jun 30, 2017

Identified By: Self-Revealing

Item Type: FIN Finding

Failure to Evaluate Operating Experience

A finding of very low safety significance was self-revealed for the failure to follow program description PI-AA-102, "Operating Experience Program," Revision 3. Specifically, the licensee failed to evaluate operating experience that

applied to Point Beach that identified the potential for cable connectors to disconnect due to machine vibration. PI-AA-102, Section 5, Instructions, Step 5.1(3), Screening Operating Experience Items, states, "If the initial screening indicates potential applicability to a NextEra Energy nuclear plant, program (including corporate administered programs), policy, process, or procedure; then an evaluation is conducted." Subsequently, a disconnected magnetic speed sensor cable on the G-04 emergency diesel generator caused a failure during a surveillance run attempt. The licensee's short term corrective actions included reconnecting the G-04 EDG magnetic speed sensor cable and installing lock-wire to prevent the connector from unintentionally disconnecting. The licensee's long-term corrective actions included changing their maintenance procedures to check connector tightness on the diesels periodically.

The inspectors determined that the failure to evaluate the external operating experience was contrary to licensee program description PI-AA-102 and was a performance deficiency. The finding was determined to be more than minor because the failure to evaluate operating experience was associated with the Mitigating Systems cornerstone attribute of Equipment Reliability and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). The inspectors applied IMC 0609, Attachment 4, "Initial Characterization of Findings," issued October 7, 2016, to this finding. The inspectors answered "Yes" to question A within Table 3, "Significance Determination Process Appendix Router," and transitioned to IMC 0609, Appendix G, Attachment 1, "Shutdown Operations Significance Determination Process Phase 1 Initial Screening and Characterization of Findings," dated May 9, 2014. The inspectors referenced Exhibit 3 - Mitigating Systems Screening Questions. The finding screened as of very low safety significance (Green) because the inspectors answered "No" to the screening questions. The inspectors did not identify a cross-cutting aspect. The cause of the finding occurred in 2012 and was not reflective of present performance.

Inspection Report# : 2017002 (*pdf*)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

The security cornerstone is an important component of the ROP, which includes various security inspection activities the NRC uses to verify licensee compliance with Commission regulations and thus ensure public health and safety. The Commission determined in the staff requirements memorandum (SRM) for SECY-04-0191, "Withholding Sensitive Unclassified Information Concerning Nuclear Power Reactors from Public Disclosure," dated November 9, 2004, that specific information related to findings and performance indicators associated with the security cornerstone will not be publicly available to ensure that security-related information is not provided to a possible adversary. Security inspection report cover letters will be available on the NRC Web site; however, security-related information on the details of inspection finding(s) will not be displayed.

Miscellaneous

Current data as of : February 01, 2018

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