

# Point Beach 1

## 4Q/2010 Plant Inspection Findings

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### Initiating Events

**Significance:**  Dec 31, 2010

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

#### **Failure to Follow Power Operation to Hot Standby 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 self-revealed when an auxiliary operator failed to correctly perform a procedure step. Specifically, OP 3A, "Power Operation to Hot Standby Unit 1," step 5.11.7 directed the auxiliary operator to ensure the turbine crossover steam dump valves were closed. However, the auxiliary operator misread the position indication for the valves as closed, when, in fact, the valves were open. Because the valves were never closed, an uncontrolled lowering of condenser vacuum occurred, requiring licensed operators to trip the reactor. The licensee initiated a condition report, performed an apparent cause evaluation, and initiated corrective actions to address the issues identified in the causal evaluation.

The finding was determined to be more than minor because it was associated with the Initiating Events Cornerstone attribute of Human Performance and adversely affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the failure to follow the procedure resulted in a reactor trip. The finding was determined to be of very low safety significance because the inspectors answered "no" to the Initiating Events Cornerstone Transient Initiator questions. The finding has a cross cutting aspect in the area of human performance, work practices, because operations personnel did not utilize human performance error prevention techniques. Specifically, operations personnel failed to follow standards for pre job briefs, verification and validation, and self checks (H.4(a)).

Inspection Report# : [2010005](#) (*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*)

**Significance:** G 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*)

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## **Mitigating Systems**

**Significance:** G 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:** **G** 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:** **G** 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:** G 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*)

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## 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*)

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## Emergency Preparedness

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## 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*)

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## **Public Radiation Safety**

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## **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.

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## **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