

# Point Beach 1

## 2Q/2011 Plant Inspection Findings

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### 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:**  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*)

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## 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.  
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.

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)

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## **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)).

**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.

## **Emergency Preparedness**

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## **Occupational Radiation Safety**

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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 : October 14, 2011