

Point Beach 1

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

Failure to Perform Evaluations on Boric Acid Leaks

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 adequately perform boric acid leak evaluations for boric acid leaks as required by the Boric Acid Program. The licensee entered this issue into its CAP and was evaluating corrective actions at the end of the inspection period.

This finding was determined to be more than minor because it was associated with the human performance attribute of the Initiating Events Cornerstone and 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. The inspectors used Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a for the Initiating Events Cornerstone, dated January 10, 2008, and determined the finding was of very low safety significance (Green) because the issue did not result in exceeding the Technical Specification (TS) limit for identified reactor coolant system (RCS) leakage or affect other mitigating systems resulting in a total loss of their safety function. The inspectors also determined that the finding has a cross-cutting aspect in the area of human performance, work practices component, because the licensee did not effectively communicate expectations regarding procedural compliance and personnel following procedures [H.4(b)].

Inspection Report# : [2008005](#) (*pdf*)

G**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

G**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: 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 31, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Recognize Unit 1 Component Cooling Water Pump Was Inoperable On January 1, 2009

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of Technical Specification (TS) 3.7.7, "Component Cooling Water (CCW) System," for the failure to recognize that the Unit 1 1P-11B CCW pump was inoperable. Consequently, the licensee failed to take actions in accordance with TS for an inoperable CCW pump. Specifically, on January 1, 2009, auxiliary operators added a full reservoir (bubbler) of oil to the inboard bearing for the second time in 24 hours, due to an oil leak. This abnormal condition was not appropriately characterized by the licensee until after two more oil additions, when a condition report was written to document the oil addition on January 5, 2009. The licensee performed an apparent cause evaluation and implemented corrective actions to address the deficiencies and lessons learned from this finding.

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 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). Specifically, the CCW pump was degraded with an inboard bearing oil leak and may not have been able to fulfill the 30-day mission time of the pump. 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 inspectors determined that the finding required a Phase 2 analysis since the finding represented an actual loss of a single train for greater than its TS allowed outage time. The inspectors and senior reactor analyst determined through Phase 2 analysis that this issue is best characterized as a finding of very low safety significance (Green). The inspectors also determined that this 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. Specifically, licensee personnel failed on three occasions to enter the oil additions into the corrective action program which would have required a Senior Reactor Operator to screen the condition for operability [P.1(a)].

Inspection Report# : [2009002](#) (*pdf*)

Significance:  Mar 31, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Promptly Correct Component Cooling Water Pump Oil Leak On January 27, 2009

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to promptly correct a condition adverse to quality associated with an inboard oil leak on the Unit 1 1P11-B component cooling water (CCW) pump identified on January 27, 2009. Consequently, the CCW pump operated in a degraded condition until the pump was taken out-of-service to address inboard bearing oil leaks on January 31 and February 1, 2009. Specifically, on January 27, 2009, a condition report was written documenting an inboard bearing leak; however, the immediate operability screening was incorrect and the licensee's screening process failed to ensure prompt corrective actions were taken to address this condition adverse to quality. The licensee performed an apparent cause evaluation and implemented corrective actions to address the deficiencies and lessons learned from this finding.

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 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). Specifically, the CCW pump was degraded with an inboard bearing oil leak and may not have been able to fulfill the 30-day mission time of the pump. 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 inspectors determined that the finding required a Phase 2 analysis since the finding represented an actual loss of a single train for greater than its Technical Specification allowed outage time. The inspectors and senior reactor analyst determined through Phase 2 analysis that this issue is best characterized as a finding of very low safety significance (Green). The inspectors also determined that this finding has a cross-cutting aspect in the area of problem identification and resolution, corrective action program component, because personnel did not thoroughly evaluate the identified problem while classifying, prioritizing and evaluating for operability and reportability of this condition adverse to quality. Specifically, licensee personnel did not thoroughly evaluate the condition adverse to quality associated with the 1P-11B CCW pump on January 27, 2009, such that the prompt corrective actions were appropriately prioritized and evaluated [P.1(c)].

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)).

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:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Draindown of Reactor Coolant System with Inaccurate Pressurizer Level Indication Due to Inadequate 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 for the failure to have procedures appropriate to the circumstances for the draindown of the reactor coolant system (RCS) from a solid plant condition. Specifically, procedure OP-4D, "Draining the Reactor Coolant System," did not require that the pressurizer level instrumentation reference line be filled within a defined period of time to ensure that the pressurizer level instrumentation functioned properly prior to draining the RCS. This resulted in the licensee draining approximately 2,000 gallons of RCS from the pressurizer without a valid control room indication of pressurizer level. The licensee performed an apparent cause evaluation and implemented corrective actions to address the procedure deficiencies and lessons learned from this finding.

The finding was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of operating procedure quality 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 pressurizer level instrumentation is utilized during shutdowns to detect and manually initiate mitigating actions for uncontrolled RCS inventory reductions. 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 inspectors used Checklist 2 contained in Attachment 1 and determined that the finding required a Phase 2 analysis since the finding increased the likelihood of loss of RCS inventory based on level deviation in the control room (Section II.A. of Checklist 2). The inspectors and senior reactor analyst determined through Phase 2 analysis that this issue is best characterized as a finding of very low safety significance (Green). The inspectors also determined that the finding has a cross cutting aspect in the area of problem identification and resolution, corrective action program, because the licensee failed to take appropriate corrective actions to address safety issues and adverse trends associated with the pressurizer level instrumentation in a timely manner, commensurate with their safety significance and complexity [P.1(d)].

Inspection Report# : [2008005](#) (*pdf*)

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Appropriately Install Unit 1 Debris Interceptors in Accordance with Installation Work Order

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 appropriately implement work orders for the installation of the Z-296-B3 debris interceptor. As a result, this portion of the modification was not installed as designed when the modification was completed and the Unit 1 reactor transitioned to Mode 3. The licensee took remedial corrective actions to correct the installation deficiency and at the end of the inspection period,

the licensee continued to perform an apparent cause evaluation.

The finding was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attributes of initial modification design control and 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 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 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. This finding has a cross cutting aspect in the area of human performance, work practices, because personnel work practices for the installation did not utilize the available human error prevention techniques, specifically self and peer checking, and the use of a questioning attitude [H.4(a)].

Inspection Report# : [2008005](#) (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:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Violation of Technical Specification 5.6.5(c) - Pressure and Temperature Limits Report Not Submitted

The inspectors identified a finding of very low safety significance and associated Severity Level IV Non-Cited Violation of Technical Specification 5.6.5(c), "Reactor Coolant System Pressure and Temperature Limits Report (PTLR)," for the failure to submit a revised PTLR to the NRC for a new fluence period. Specifically, TS 5.6.5(c) required the PTLR be provided to the NRC for each reactor fluence period. Based on the references in TS 5.6.5(b), the fluence period for revision 1 of the PTLR could not be extended past February 2004. The licensee inappropriately extended the existing PTLR applicability limit past this date and did not submit a revised PTLR as required. Corrective actions included submittal of the revised PTLR (revision 2) on November 15, 2007.

This finding was determined to be more than minor because it was associated with the design control attribute of the Barrier Integrity Cornerstone and affected the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, the curve used to define plant operating limits for acceptable pressure and temperature conditions for protection against failure of the reactor vessel was not valid after February 2004. The finding is not suitable for Significance Determination Process evaluation under the Barrier Integrity Cornerstone, but has been reviewed by NRC management and is determined to be a finding of very low safety significance. Specifically, subsequent calculations using an NRC approved methodology determined that the Point Beach Unit 1 reactor vessel was not outside of the safety limits and was fully capable of performing the required service. The inspectors determined that the finding does not have an associated cross cutting aspect.

Inspection Report# : [2008005](#) (pdf)

Significance: SL-IV Sep 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate 10 CFR 50.59 Evaluations for New Feedwater Heaters

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," was identified by the inspectors for the failure to perform a written evaluation that provided the bases for the determination that the installation of new feedwater heaters did not require a license amendment. Specifically, the licensee performed a written evaluation in June 2008 for the replacement of the feedwater heaters that inappropriately linked two elements of the modification by treating two discrete elements of the modification as interdependent. This resulted in the inappropriate evaluation of both elements together. At the end of the inspection period, the licensee continued to perform a causal evaluation and implemented several remedial corrective actions, including the revision of the feedwater heater modification package to keep feedwater temperature in the currently approved range.

The finding was determined to be more than minor because if left uncorrected the finding would become a more significant safety concern, in that, changes made to the plant may inappropriately conclude that prior NRC approval is not required. The finding is not suitable for Significance Determination Process evaluation under the Barrier Integrity Cornerstone, but has been reviewed by NRC management and is determined to be a finding of very low safety significance. The finding would have had greater than very low safety significance if the failure resulted in a change in which the consequence was evaluated as having low to moderate or greater safety significance. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of human performance, in that, the licensee failed to appropriately coordinate work activities by incorporating actions to address the need for work groups to maintain interfaces with offsite organizations and communicate, coordinate, and cooperate with each other during activities in which interdepartmental coordination is necessary to assure plant and human performance. [H.3 (b)]

Inspection Report# : [2008004](#) (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)].

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