Point Beach 2
1Q/2015 Plant Inspection Findings

Initiating Events

Significance: G Sep 30, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Perform Required Fire Watch Inspections
The inspectors identified a finding of very low safety significance and associated NCV of license condition 4.F for the failure to conduct required fire watch inspections. Specifically, the licensee failed to inspect multiple fire zones at the correct frequency and to identify work activities that could introduce potential ignition sources, combustible materials, and other abnormal activities that could introduce an increased likelihood of a fire starting in the fire zone. The licensee implemented short term corrective actions, which included issuing guidance to personnel that prescribed a specific route and general timeframe for performing fire watch inspections, as well as, requiring the fire watches to initial for each individual fire zone for each inspection.

The finding was determined to be more than minor because the failure to conduct the required fire watch inspections was associated with the Initiating Events cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). The inspectors evaluated the finding in accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Initial Screening and Characterization of Findings,” Table 3, “SDP Appendix Router.” In Question 2 of Section E, “Fire Protection,” the inspectors answered "yes" to the screening question “Does the finding involve: 1) A failure to adequately implement fire prevention and administrative controls for transient combustible materials, transient ignition sources, or hot work activities?” Therefore, a detailed risk evaluation was performed by the Senior Reactor Analysts (SRAs) using IMC 0609, Appendix F, “Fire Protection Significance Determination Process,” and the licensee’s preliminary NFPA-805 analyses as described in Section 1R05.1. Based on the detailed risk evaluation, the SRAs determined that the finding was of very low safety significance. This finding has a cross-cutting aspect of Avoid Complacency (H.12), in the area of human performance, for failing implement appropriate error reduction tools.

Inspection Report# : 2014004 *(pdf)*

Mitigating Systems

Significance: G Mar 31, 2015
Identified By: NRC
Item Type: FIN Finding
Failure to Process Vendor Technical Information
A finding of very low safety significance was identified by the inspectors for the failure to follow site procedure NP 7.2.13, “Processing of Vendor Technical Information.” Specifically, the licensee failed to process a vendor technical bulletin in accordance with NP 7.2.13. Procedure NP 7.2.13 required that relevant vendor correspondence received by the licensee be analyzed to identify specific actions needed to operate and maintain the plant safely.

The inspectors assessed licensee apparent cause evaluation (ACE) 1983930, "D–107 Current Limit Was Out of Range," related to multiple D–107 battery charger failures. The inspectors' review determined that the licensee's ACE identified a technical bulletin (TB) that provided relevant information related to the inspection, adjustment, and replacement of an electrical connector located in some of the licensee's safety-related battery chargers. The technical bulletin, TB–143001–00, "PCP edge card connector and terminals," was dated March 2004 with a revision published in March 2005. The licensee's ACE concluded that the vendor information was not incorporated into licensee procedures but failed to discuss why the vendor information had not been incorporated. The inspectors continued their assessment to determine why the information was not appropriately incorporated into licensee procedures and maintenance processes at the time the technical information was distributed. The inspectors reviewed procedure NP 7.2.13, which was in effect during the timeframe that TB–143001–00 and its revision were published, and found that it prescribed a process to assess vendor technical information to determine which licensee documents and drawings needed to be updated. The inspectors determined based on interviews with engineering personnel that the licensee did receive the technical bulletin around the general time of its publication; however, due to an oversight, NP 7.2.13 was not followed and the information was not submitted for review and processing.
The inspectors also reviewed the licensee's handling of the same technical bulletin during the completion of the ACE 1983930 in 2014 and found that the licensee did initiate a corrective action to incorporate the technical bulletin information into the licensee's routine maintenance procedures (RMPs), but again did not follow the process prescribed in the licensee's current procedure EN–AA–204–1107, "Processing Vendor Documents." Procedure EN–AA–204–1107 replaced procedure NP 7.2.13 in early 2014 and contained a similar comprehensive assessment of the vendor documents, including updating the equipment database with the vendor document number.

This finding is closed to IR 2015-001.
Inspection Report# : 2015001 *(pdf)*

Significance: G Mar 27, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Promptly Correct Conditions Adverse to Quality Regarding Electrical Power Cable Sizing and Protection (Section 1R21.3.b.(1))
Green. The inspectors identified a finding of very-low safety significance, and an associated Non-Cited Violation of Title 10, Code of Federal Regulations (CFR) Part 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to implement timely corrective actions to address the longstanding issue of electrical power cables that have not been verified to be sized or protected in accordance with their design bases, as described in PBNP's Final Safety Analysis Report Section 8.0.1. Specifically, the licensee failed to correct known deficiencies regarding: (1) power cables with operating currents in excess of their current-carrying capacities; (2) power cables that are not protected against overload in accordance with the National Electrical Code; and (3) power cables for which their current-carrying capacities are undetermined. Although various corrective action documents have been initiated since these issues first came to light in the 1990 to 1991 time period, the licensee has not taken appropriate actions to correct the conditions adverse to quality to this date. The licensee entered this finding into their Corrective Action Program as Condition Report (CR) 02035020 and CR 02035680, with recommended actions to perform ampacity analysis for applicable cables, verify cables are protected against overload in accordance with the National Electrical Code, verify cable ampacities are higher than their respective load currents, and perform an evaluation to determine why this issue has not been resolved and address the safety culture aspect.

The inspectors determined the licensee's failure to promptly correct the conditions adverse to quality regarding electrical power cables was a performance deficiency warranting a significance determination. The performance deficiency was determined to be more than minor, and a finding in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," because it was associated with the Design Control attribute of the Reactor Safety, Mitigating Systems Cornerstone, and it adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable

consequences. The inspectors evaluated the finding in accordance with IMC 0609.04, Phase 1, "Initial Screening and Characterization of Findings." The finding screened as having very-low safety significance (Green) because it was a design or qualification deficiency that did not represent a loss of operability or functionality; did not represent an actual loss of safety function on the system or train; did not result in the loss of one or more trains of non-technical specification equipment; and did not screen as potentially risk significant due to seismic, flooding, or severe weather. The inspectors identified a crosscutting aspect associated with this finding in the area of Human Performance, associated with the Design Margin component, because the licensee failed to ensure equipment is operated within design margins, and margins are carefully guarded and changed only through a systematic and rigorous process. [H.6] (Section 1R21.3.b (1))

Inspection Report# : 2015008 *(pdf)*

Significance: G Dec 31, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Promptly Correct a Failed Emergency Diesel Generator Day Tank Room Heater (Section 1R01.1)
A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified by the inspectors for the failure to promptly repair the non-functional HX-272A, a safety-related room heater for the G-04 Emergency Diesel Generator (EDG) day tank room. Specifically, HX-272A was identified failed in June 2012 and was not corrected until November 2014 but not before inspectors identified that the redundant room heater, HX-272B, had also failed and the room temperature had dropped below the design basis temperature of 50 degrees Fahrenheit. The licensee repaired HX 272A on November 25, 2014 and also installed a thermometer in the fuel oil day tank room for operators to monitor room temperature. The licensee entered the issue into their CAP as action request (AR) 02018260 and AR 02008296.
The inspectors determined that failing to promptly repair safety-related room heater, HX-272A, G-04 EDG day tank room heater was contrary to 10 CFR 50 Appendix B, Criterion XVI and was a performance deficiency. The inspectors determined that the finding was more than minor, because, if left uncorrected, it could have the potential to become a more significant safety concern. Specifically, the inspectors found both safety-related heaters non-functional in the fuel oil day tank room with outside air blowing into the room through a ventilation damper. The outside temperature was approximately 17 degrees Fahrenheit, and while the licensee determined that at the time their fuel oil cloud point was approximately zero degrees Fahrenheit, the licensee's specification for fuel oil cloud point allowed for a fuel oil cloud point of up to 25 degrees Fahrenheit. Additionally, if the fuel oil day tank room temperatures dropped below freezing, the fire sprinkler piping within the room could have actuated and/or ruptured and adversely affected the safety-related fuel oil transfer pumps within the room. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At Power," Exhibit 2, Mitigating Systems Screening Questions, dated June 19, 2012.
The inspectors concluded that the finding was of very low safety significance because the inspectors answered "No" to the Mitigating Systems screening questions. This finding has a cross cutting aspect of Work Management (H.5), in the area of Human Performance, for failing to implement a process of planning, controlling, and executing work activities such that nuclear safety is an overriding priority. (Section 1R01.1)

Inspection Report# : 2014005 *(pdf)*

Significance: G Sep 30, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Identify Degraded Water Sprinkler System
The inspectors identified a finding of very low safety significance and associated NCV of license condition 4.F for the

licensee's failure to identify a degraded water sprinkler system in the service water pump room and implement hourly fire watch inspections. Specifically, the licensee installed scaffolding in the service water pump room that interfered with the operation of the water sprinkler system and failed to implement hourly fire watch inspections as a compensatory measure. The licensee began fire watch inspections and credited installed fire hoses in the area for backup suppression until the planking could be removed from the scaffolding.
The finding was determined to be more than minor because the failure to identify the degraded sprinkler system and implement compensatory fire watch inspections was associated with the Mitigating Systems cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). In accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding degraded fire protection defense-in-depth strategies, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors screened the issue to Green under the Phase 1 Screening Question 1.3.1-A, because the inspectors determined that the impact of a fire would be limited to one train/division of service water pumps and a credited safe shutdown path would be unaffected. This finding has a cross-cutting aspect of Procedure Adherence (H.8), in the area of human performance, because the licensee did not follow processes, procedures, and work instructions.

Inspection Report# : 2014004 *(pdf)*

Significance: G Sep 30, 2014
Identified By: NRC
Item Type: FIN Finding
Incomplete Prompt Operability Determination of Non-Seismic Block Wall
The inspectors identified a finding of very low safety significance due to the licensee's failure to follow procedure EN AA 203 1001, "Operability Determinations/Functionality Assessments." Specifically, when the licensee identified that the north non-vital switchgear (NVSGR) block wall was found to be non-seismic and potentially susceptible to collapsing and blocking the flood relief dampers, they failed to evaluate all potential water sources that could spray or flood the NVSGR and cascade into the vital switchgear room below. Following questions by the inspectors, the licensee evaluated the additional water sources; isolated two additional fire protection hose reels on the south side of the NVSGR; and updated the prompt operability determination (POD).
The finding was determined to be more than minor because the failure to evaluate and disposition each potential flood source in the POD was associated with the Mitigating Systems cornerstone attribute of Protection Against External Events (Seismic) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 4, "External Events Screening Questions," dated June 19, 2012. The inspectors answered "yes" to question 1 of External Events screening questions since the finding could potentially degrade one train of the emergency power system. The inspectors consulted the regional SRA, who completed a detailed risk evaluation, and determined that the finding was of very low safety-significance. This finding has a cross-cutting aspect of Identification (P.1), in the area of problem identification and resolution, for failing to identify issues completely, accurately, and in a timely manner in accordance with the program.

Inspection Report# : 2014004 *(pdf)*

Significance: G Jun 30, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Maintain Control of Loose Material in Containment

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” was identified by the inspectors for the failure to follow procedures. Specifically, while Unit 2 was in Mode 3, the licensee left buoyant items in containment that were neither anchored or tethered to a substantial structure nor located in an anchored storage box or receptacle, as required by NP 7.2.28, “Containment Debris Control Program,” Revision 5, Step 4.2.8(d)3. The licensee entered the issue into their corrective action program (CAP) and implemented short term corrective actions, which included removing the material from containment and communicating to station personnel the importance of not leaving susceptible material unattended in containment while in Modes 1 through 4. The licensee’s long-term corrective actions included creating a site specific procedure that places all the containment debris control requirements in one central location.
The inspectors determined that the finding was more than minor, because it was associated with the Equipment Performance attribute of the Mitigating Systems cornerstone. The finding adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Initial Characterization of Findings,” dated June 19, 2012, and Appendix A, “The Significance Determination Process for Findings At Power,” Exhibit 2, Mitigating Systems Screening Questions, dated June 19, 2012. The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered “No” to the Mitigating Systems screening questions. This finding has a cross cutting aspect of Training (H.9), in the area of Human Performance, for failing to provide training and ensure knowledge transfer to maintain a knowledgeable workforce.
Inspection Report# : 2014003 *(pdf)*

Significance: G Jun 30, 2014
Identified By: Self-Revealing
Item Type: NCV Non-Cited Violation
Age Related Relay Failures Result in Inoperable Inverters
A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” was self-revealed for the failure to replace safety-related inverter components at the vendor prescribed 10 year frequency. Specifically, after concluding that safety-related inverter relays were required to be replaced at a 10-year frequency, per vendor direction, the licensee failed to promptly replace the remaining relays that were eighteen years old or evaluate if the relays could remain in service until the next scheduled 10 year inverter overhaul. The licensee entered the issue into their CAP and replaced the remaining K2 relays that were past their 10-year replacement frequency in April and June of 2014 and has plans to replace the remaining K1 relays, which provide alarm only function, in 2015.
The inspectors determined finding was more than minor because it was associated with the Equipment Performance attribute of the Mitigating System cornerstone and affected the cornerstone objective of ensuring the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the performance deficiency resulted in three additional K2 relay failures in 2013 and 2014, two of which occurred while the inverters were carry instrument bus loads and caused the inoperability of the associated inverters. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Initial Characterization of Findings.” Because the finding impacted the Mitigating Systems Cornerstone, the inspectors screened the finding through IMC 0609, Appendix A, “The Significance Determination Process for Findings At-Power,” using Exhibit 2, “Mitigating Systems Screening Questions.” The inspectors concluded that the finding was of very low safety significance (Green), because the inspectors answered “No” to the Mitigating Systems screening questions. This finding has a cross cutting aspect of Resolution (P.3), in the area of Problem Identification and Resolution because the licensee failed to take effective corrective actions to address issues in a timely manner commensurate with their safety significance.
Inspection Report# : 2014003 *(pdf)*

Barrier Integrity

Significance: G Sep 30, 2014
Identified By: NRC
Item Type: FIN Finding
Deficiencies in Calculation Performed to Support Containment Dome Truss Operability
The inspectors identified a finding of very low safety significance for deficiencies in licensee's calculation performed to support operability of the unit 1 containment building dome truss and the safety related components supported from the truss. The licensee reassessed the dome truss members and connections that were found to be highly stressed and concluded that the components remained within the acceptable limits. The licensee initiated AR 01986069 to capture the concern identified by the inspectors and revised the POD.
The finding was determined to be more than minor because the finding is associated with the RCS Equipment and Barrier Performance Attribute of the Barrier Integrity cornerstone and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. Specifically, failure of the dome truss could impact the reliability/availability of the containment spray system to maintain operability of the containment. Additionally, More than Minor Example 3.j of IMC 0612, Appendix E, "Examples of Minor Issues," was used to inform the answer to this more than minor screening question. Specifically, the licensee's failure to address torsional effects and use of non conservative allowable stress values for evaluation of containment dome truss components, at the time of discovery, resulted in reasonable doubt of the operability of the subject walls. In accordance with IMC 0609, "Significance Determination Process," Attachment 4, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Barrier Integrity cornerstone. As a result, the inspectors determined the finding could be evaluated using IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 3. Because the finding did not represent an actual failure of a component required to maintain containment integrity, the inspectors answered "no" to Screening Questions 1 and 2 for the Reactor Containment section, and determined the finding was of very low safety significance. This finding has a cross cutting aspect of Conservative Bias (H.14) in the area of human performance for the licensee's failure to use conservative decision making practices in the operability evaluation of the containment dome truss.
Inspection Report# : 2014004 *(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Significance: G Mar 31, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Quantify Radionuclides in the Body for Internal Dose Assessments
The inspectors identified a finding of very-low safety significance (Green), and an associated NCV of 10 CFR 20.1204 for the licensee's failure to take suitable measurements of quantities of radionuclides in the body for assessing internal dose for occupational exposure control.
Fleet procedure RP–AA–101, "Personnel Monitoring Program", requires
that all radiation workers be monitored for radiation exposure. This includes the

analysis of internal radiation exposure by performing whole-body counts. The analysis of whole body counts and subsequent dose assessments are governed by site specific procedures, HPIP 1.74, “Operation of the Canberra Whole-Body Counter,” and HPIP 1.57.1, “Evaluation of Whole-Body Count Results”. The whole-body count is used to determine the amount of each radionuclide present in the body at the time the count was performed. Based on this information, dose calculations are performed to determine the dose to the individual due to these internally deposited radionuclides. Therefore, in order to perform correct dose calculations, it is important to determine which radionuclides are in the body and the quantity present of each of these radionuclides.
This NCV is closed to IR 2015-001.
Inspection Report# : 2015001 *(pdf)*

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the cover letters to security inspection reports may be viewed.

Miscellaneous

Last modified : June 16, 2015