

Point Beach 1

3Q/2016 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Perform Required Fire Watches in Areas Containing Transient Combustibles

A finding of very low safety significance and associated NCV of license condition 4.F was identified by the inspectors for the licensee's failure to conduct required fire watch inspections in accordance with the licensee's Fire Protection Program requirements. Specifically, while conducting fire protection walkdowns of both unit's residual heat removal (RHR) pipeway and heat exchanger rooms, the inspectors discovered numerous transient combustible items in areas that the licensee had controlled using tamper seals on the entrances in lieu of physical entry. The licensee's corrective actions included documenting and quantifying the removal of the items from the zones and additional actions to perform additional evaluation of the fire zones.

The finding was determined to be more than minor because the failure to conduct the required fire watch inspections was associated with the Initiating Events cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of preventing undesirable consequences (i.e., core damage). Specifically, the failure to conduct the required fire watch inspections or meet the alternate measures specified by the licensee's engineers, allowed unanalyzed transient combustibles and ignition sources to be present in fire zones that contained both trains of both unit's RHR pumps, heat exchangers and associated equipment. The inspectors determined the finding could be evaluated in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding degraded fire protection defense-in-depth strategies, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors screened the issue under the Phase 1 Screening Question 1.3.1-A, and determined that determined that the finding was of very low safety significance (Green), because the inspectors determined that the impact of a fire would not prevent either reactor from reaching and maintaining safe shutdown (hot). This finding has a cross-cutting aspect of Bases for Decisions (H.10), in the area of human performance, because the licensee's leadership did not ensure that the bases for operational and organizational decisions are communicated in a timely manner. Specifically, the licensee did not periodically verify the understanding of the individuals assigned to fire watches, in particular, that the relief from physical entry and application of a tamper seal required a thorough tour of the zones following any entry into those fire zones.

Inspection Report# : [2016002](#) (*pdf*)

Significance:  Jun 30, 2016

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Incorrectly Wiring Causes Transformer Lockout

A finding of very low safety significance and associated NCV's of TS 3.8.1, "AC Sources Operating" and TS 3.8.2, "AC Sources Shutdown," were self revealed for the licensee's failure to follow procedure RMP 9056-9B, "1X-03, Protective Relay Calibration and Testing." Specifically, a wiring error in the 1X-03 connection box, which occurred in 2013, caused the 1X-03 transformer's differential protection circuitry to lockout the transformer at current levels below the design protection values. The licensee's corrective actions included correcting the improper wiring in the

1X-03 connection box and evaluating other work performed by the same vendor during that timeframe. The inspectors determined that the finding was more than minor because it was associated with the Initiating Events cornerstone attribute of Equipment Performance and affected the cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the lockout of 1X-03 caused a loss of one of the licensee's offsite power lines and also caused a loss of power to multiple station battery chargers placing Unit 2 into limiting condition for operation (LCO) 3.0.3. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix A, "The Significance Determination Process for Findings At-Power," Exhibit 1, Initiating Events Screening Questions, dated June 19, 2012. The inspectors answered "Yes" to the Support System Initiators question; therefore, a Detailed Risk Evaluation was required. Based on the conclusions in the Detailed Risk Evaluation, the SRA determined that the finding was of very low safety significance (Green). This finding has a cross-cutting aspect of Avoid Complacency (H.12), in the area of Human Performance, for failing to implement appropriate error reduction tools. Specifically, the incorrectly performed procedure step, in RMP 9056-9B, clearly specified which terminal point to land the wires on, the terminal points were clearly labeled, and the step required a concurrent verification; however, even with those barriers in place, the task performers still landed the wires on the wrong location.

Inspection Report# : [2016002](#) (*pdf*)

Mitigating Systems

Significance:  Jun 30, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

Submerged Safety-Related Emergency Diesel Generator Fuel Oil Transfer Pump Cables

A finding of very low safety significance and associated NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified by the inspectors, for the failure to maintain emergency diesel generator (EDG) fuel oil transfer pump safety-related cables in an environment for which they were designed. Specifically, the licensee allowed the safety-related cables to be submerged in water, which was outside of their design, in manhole Z-066B. The licensee's corrective actions included pumping the water out of the manholes, repairing the failed sump pump, level switch, and alarm circuit; and performing an engineering evaluation to quantify the level of degradation as a result of the submergence.

The performance deficiency was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," issued on June 19, 2012. Specifically, the inspectors used IMC 0609 Appendix A "SDP for Findings At-Power," issued June 19, 2012, Exhibit 2, "Mitigating Systems Screening Questions" to screen the finding. The finding screened as of very low safety significance (Green) because the inspectors answered "Yes" to the question "does the SSC maintain its operability or functionality." Specifically, the submergence of the G-01 and G-02 EDG fuel oil transfer pump cables did not render the transfer pumps inoperable. This finding has a cross-cutting aspect Evaluation (P.2) in the area of problem identification and resolution, because the licensee did not thoroughly evaluate problems to ensure that resolutions address causes and extent of conditions, commensurate with their safety significance. Specifically the licensee failed to thoroughly investigate and prioritize the failure of the manhole alarm and pumping system according to the safety significance of the cables contained within the manholes which led to prolonged and unevaluated submergence of the cables.

Inspection Report# : [2016002](#) (*pdf*)

Significance:  Dec 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Follow Fire Protection Program Requirements for Care, Use and Maintenance of Fire Hose

The inspectors identified a finding of very low safety significance and associated Non-Cited Violation of license condition 4.F for the licensee's failure to have procedures or instructions to prevent firefighting booster hoses from being kinked and/or twisted on hose reels. Specifically, booster hoses were installed on hose reels in both unit's containments and in the turbine building (TB), which were twisted and kinked. The licensee's corrective actions included rewinding hoses in the Unit 2 containment, four hoses in the TB, and creating compensatory measures for hose reels for the Unit 1 containment.

The finding was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Events (Fire) and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. Specifically, the licensee failed to ensure that activities such as inspection, testing, and maintenance of fire protection systems were prescribed and accomplished in accordance with documented instructions, procedures, and drawings. In accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2, the inspectors determined the finding affected the Mitigating Systems cornerstone. The finding degraded fire protection defense-in-depth strategies, and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors screened the issue to Green under the Phase 1 Screening Question 1.3.1-A, because the inspectors determined that the impact of a fire would be limited to one train/division of equipment for the affected fire areas and at least one credited safe shutdown path would be unaffected. This finding has a cross-cutting aspect of Training (H.9), in the area of human performance, because the licensee did not provide training and ensure knowledge transfer to maintain a knowledgeable, technically competent workforce, and instill nuclear safety values. Specifically, the inspectors determined that operations personnel were not adequately trained to recognize deficiencies associated with firefighting equipment standards, such as kinked and twisted hoses on hose reels, and subsequently failed to initiate actions to remedy such conditions.

Inspection Report# : [2015004](#) (pdf)

Barrier Integrity

Significance:  Jun 30, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

Violation of Technical Specifications During Mode 4 Entry With LCO 3.6.6 Not Met

A finding of very low safety significance and associated NCV of Technical Specification 3.0.4 was identified by the inspectors for the licensee's failure to follow procedure OP 1A, "Cold Shutdown to Hot Standby Unit 1" and checklist CL 2C, "Mode 5 to Mode 4 Checklist." Specifically, the licensee entered Mode 4 from Mode 5 without meeting the requirements of LCO 3.0.4 for entering a Mode when an applicable LCO is not met. The licensee had not met LCO 3.6.6 because the control switches for two out of the required four containment accident recirculation fans were in their pullout position instead of the required automatic position. Corrective actions for this event included restoration of accident cooler fan control switches to automatic. Additional corrective actions included: performance of an apparent cause evaluation; changes to the licensee's ORT 3 test procedures to restore accident fan cooler switches after completion of testing; updating OP 1A to include performance of a control room shift turnover checklist prior to changing modes; and planned enhancements to CL 2 series procedures to strengthen a note on the responsibility of the SRO when ensuring operability of LCOs.

The inspectors determined that the finding was more than minor because it was associated with the Barrier Integrity cornerstone attribute of Human Performance and 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, the failure to follow procedures OP 1A and CL 2C caused the licensee to unknowingly operate with multiple containment accident recirculation fans inoperable, which were required in Mode 4. 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 G, Attachment 1, "Shutdown Operations Significance Determination Process Phase 1 Initial Screening and Characterization of Findings," Exhibit 4, Barrier Integrity Screening Questions, dated May 9, 2014. The inspectors answered "no" to the Containment Barrier Screening Questions and determined the finding had very low safety significance (Green). This finding has a cross-cutting aspect of Challenge the Unknown (H.11), in the area of Human Performance, for failing to stop when faced with uncertain conditions. Specifically, when the licensee assessed the illuminated Safeguards Equipment Locked Off alarm, during their control board walk down, they confirmed that the safety injection pump control switch was in pullout and was a reason for the alarm to actuate; however, they failed to confirm that other inputs to the alarm were also not valid.

Inspection Report# : [2016002](#) (*pdf*)

Significance:  Jun 30, 2016

Identified By: NRC

Item Type: FIN Finding

Fuel Assembly Move Sequence Planned Incorrectly

A finding of very low safety significance was identified by the inspectors, for the licensee's failure to follow procedure REI 26.0, "Fuel/Insert/Component Movement Planning." Specifically, the licensee failed to follow procedure REI 26.0, Step 5.5.7.b, which verified that the licensee would not place fuel assemblies with cooling times less than 295 days into spent fuel pool rack foot locations. The licensee's corrective actions included completing additional spent fuel moves, which placed the spent fuel pool into an appropriate configuration.

The inspectors determined that the finding was more than minor, because, if left uncorrected, it had the potential to become a more significant safety concern. Specifically, if the inspectors had not questioned the licensee about spent fuel pool rack foot locations, the spent fuel pool would have remained in an incorrect configuration. The inspectors concluded this finding was associated with the Barrier Integrity cornerstone. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," dated June 19, 2012, and Appendix L, "B.5.b Significance Determination Process", "Table 2 – Significance Characterization," The inspectors determined that the finding did not meet the criteria in Table 2 for a Greater Than Green significance; therefore, the finding was of very low safety significance (Green). This finding has a cross-cutting aspect of Avoid Complacency (H.12), in the area of Human Performance, for failing to implement appropriate error reduction tools. Specifically, the licensee became desensitized to overriding fuel placement constraints and failed to implement effective human performance tools to prevent the error

Inspection Report# : [2016002](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

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

Miscellaneous

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