Brunswick 1
2Q/2015 Plant Inspection Findings

Initiating Events

Significance: G Sep 30, 2014
Identified By: NRC
Item Type: FIN Finding
Inadequate Procedure to Perform Core Ground Checks on the Common Bus C Transformer
A self-revealing Green finding of Licensee Procedure 0PM-XMR001, ITE Substation Transformers, was identified for the failure to have an adequate procedure to perform preventative maintenance on the Common Bus C 4160/480V Transformer. Specifically, between May 6, 2009 and March 23, 2012, the licensee failed to incorporate Procedure Revision Requests (PRRs) 312951 and 334482 to add core ground testing of the Common C transformer, resulting in the transformer failing and a Unit 1 manual reactor SCRAM. The licensee replaced the transformer to Common Bus C. The licensee entered this issue into the CAP as nuclear condition report (NCR) 519193.

The inspectors determined that the failure of the licensee to have an adequate procedure to perform preventative maintenance on the Common Bus C transformer was a performance deficiency. The finding was more than minor because it was associated with the equipment performance attribute of the Initiating Events Cornerstone and affects the cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the failure to perform preventative maintenance on the Common Bus C transformer resulted in the transformer failing and a Unit 1 manual reactor SCRAM. Using IMC 0609, Appendix A, issued June 19, 2012, the SDP for Findings At-Power, the inspectors determined the finding was of very low safety significance (Green) because the finding did not cause a reactor trip and the loss of mitigation equipment relied upon to transition the plant from the onset of the trip to a stable shutdown condition. The finding does not have a cross-cutting aspect since the performance deficiency is not indicative of current plant performance. The PRR was initiated on May 6, 2009.
Inspection Report# : 2014004 *(pdf)*

Mitigating Systems

Significance: G Jun 30, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
Inadequate Procedure for the 1B Conventional Service Water Pump Strainer Repair
An NRC-identified Green NCV of 10 CFR Part 50, Appendix B, Criterion V, Instructions, Procedures, and Drawings, was identified for the licensee's failure to have an adequate procedure to perform maintenance on the 1B conventional service water (CSW) pump strainer. Specifically, between August 28, 2009, and May 11, 2015, licensee procedure MNT NGGC-0009, Application of Protective Coatings, was not adequate to perform repairs on the 1B CSW pump strainer, which resulted in through wall leaks on three occasions. As corrective actions, the licensee repaired the weld, recoated the inside of the affected strainer area with Belzona coating using qualified individuals, and updated procedure MNT-NGGC-0009. The licensee entered this issue into the CAP as NCR 747712.

The inspectors determined that the licensee's failure to have an adequate procedure to perform maintenance on the 1B CSW pump strainer was a performance deficiency. The finding was more than minor because if left uncorrected, it had the potential to lead to a more significant safety concern. Specifically, it could have led to a more significant failure of the 1B CSW pump strainer and the service water system. Using IMC 0609, Appendix A, issued June 19, 2012, the SDP for Findings At-Power, the inspectors determined the finding was of very low safety significance (Green) because the finding did not affect the design or qualification of a mitigating SSC, the finding did not represent a loss of system and/or function, the finding did not represent an actual loss of a function of a single train for greater than the TS allowed outage time, the finding did not represent an actual loss of a function of one or more non-TS trains of equipment, and did not screen as potentially risk-significant due to a seismic, flooding, or severe weather initiating event. The finding has a cross-cutting aspect in the area human performance associated with the documentation attribute because the licensee failed to create and maintain complete, accurate and up-to-date documentation to correct the 1B CSW pump strainer through-wall leak issue on three occasions.

Inspection Report# : 2015002 *(pdf)*

Significance: G Dec 31, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Protect Emergency Diesel Generator 4-Day Fuel Oil Tank Ventilation Piping from Tornado Missiles
The NRC-identified a Green non-cited violation (NCV) of Title 10 of the Code of Federal Regulations (10 CFR) Part 50, Appendix B, Criterion III, Design Control, for the failure to ensure adequate tornado missile protection for the emergency diesel generator (EDG) 4-day fuel oil tank ventilation piping. Specifically, it was determined that the ventilation piping could be sheared with a design basis tornado missile at the 4-day fuel oil tank building roof level and water intrusion into the EDG fuel oil system would occur during a design basis rain event that would prevent the diesel from performing its required safety function. The licensee documented this issue in their corrective action program (CAP) and performed corrective actions to install concrete blocks around the piping.

The inspectors determined that the finding was more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated September 7, 2012, because it is associated with the Mitigating Systems Cornerstone attributes of Protection Against External Factors and Equipment Performance, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, it was determined that the ventilation piping could be sheared with a design basis tornado missile at the 4-day fuel oil tank building roof level and water intrusion into the EDG fuel oil system would occur during a design basis rain event that would prevent the EDG from performing its required safety function. Using IMC 0609, Appendix A, issued June 19, 2012, "The Significance Determination Process (SDP) for Findings At-Power," the inspectors determined the finding screened to a detailed risk evaluation since the EDG1 fuel oil system was assumed to be completely failed due to a tornado, and it would degrade one or more trains of a system that supports a risk significant system or function. The regional Senior Reactor Analyst performed a detailed risk evaluation by using a qualitative screening analysis to determine the significance of the finding. Tornado initiating event frequency was derived from Nation Weather Service data. Because of the low likelihood of a tornado powerful enough to throw an object of sufficient size to damage the piping, the remote chance the thrown object would strike the vent pipe, and because the remaining EDGs would not be impacted in the same way by the tornado, the finding was determined to be Green. The inspectors did not identify a cross-cutting aspect associated with this finding because the finding is an old design issue that has been in place since original plant construction.
Inspection Report# : 2014005 *(pdf)*

Significance: G Sep 30, 2014
Identified By: NRC

Item Type: FIN Finding
Failure to Correct SLC Tank Level Indication Degradation
An NRC-identified Green finding of Licensee Procedure AD-PI-ALL-0100, Corrective Action Program (CAP), was identified for the failure of the licensee to identify and correct a condition adverse to quality with the Unit 2 standby liquid control (SLC) control room level indicator. Specifically, between February 25, 2012, and August 17, 2014, the licensee failed to identify and correct three clogged SLC tank level indicators before the indicators failed. The licensee's corrective actions included cleaning out the SLC tank level indicator bubbler and evaluating the adequacy of the preventative maintenance associated with this indicator. The licensee entered this issue into the CAP as NCRs 704327 and 704593.

The inspectors determined that the failure of the licensee to identify and correct the clogged SLC tank level indicators before the indicators failed was a performance deficiency. The finding was more than minor because it was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affects the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, this resulted in the instrument reading a higher tank level than actual due to the flow restriction in the bubbler tube, and the inoperability of the instrument. Using IMC 0609, Appendix A, issued June 19, 2012, the SDP for Findings At-Power, the inspectors determined the finding was of very low safety significance (Green) because the finding did not affect the design or qualification of a mitigating structure, system and component (SSC), the finding did not represent a loss of system and/or function, the finding did not represent an actual loss of a function of a single train for greater than the technical specifications (TS) allowed outage time, the finding did not represent an actual loss of a function of one or more non-TS trains of equipment, and did not screen as potentially risk-significant due to a seismic, flooding, or severe weather initiating event. The finding has a cross-cutting aspect in the area of human performance associated with the work management attribute because the licensee failed to implement a process of planning, controlling, and executing work activities such that nuclear safety is the overriding priority. The licensee failed to have the work process include the identification and management of risk commensurate to the work and the need for coordination with different groups. Specifically, the licensee failed to identify and manage the risk of the SLC tank level indicator bubbler clogging issue. [H.5]
Inspection Report# : 2014004 *(pdf)*

Barrier Integrity

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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