

Byron 2

2Q/2016 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2016

Identified By: NRC

Item Type: FIN Finding

Failure to Perform ASME Code Case Required Extent of Condition to Identify Unacceptable Piping Flaws

Green. A finding of very-low safety significance was identified by the inspectors when, upon identification of a through-wall leak, the licensee declared the structural integrity of Class 3 fire protection piping to be operable, but failed to perform augmented examinations within 30 days as required by American Society of Mechanical Engineers (ASME) Code Case N-513-3. The licensee repaired the leaking pipe, and upon identification by the inspectors, documented the issue in their corrective action program (CAP) as IRs 2639930 and 2652145, and performed the required augmented examinations.

The inspectors determined the performance deficiency was more than minor because, if left uncorrected, the finding had the potential to lead to a more significant safety concern. Specifically, the augmented examinations identified a location where wall thickness measurements were below the acceptance criteria such that the pipe could have ruptured during a seismic event, impacting the functionality of the fire protection system and causing a flooding hazard in the auxiliary building. Because the finding involved an internal flooding hazard, a detailed risk evaluation was performed, which determined the finding to be of very low safety significance. The inspectors determined the finding had a cross-cutting aspect in the Problem Identification and Resolution area of Evaluation [P.2], because the licensee failed to thoroughly evaluate the issue to ensure that the resolution addressed the cause and extent of condition commensurate with the safety significance. Specifically, the licensee failed to complete the N-513-3 evaluation and perform the required extent of condition activities in a timely manner as specified by the ASME Code Case. (Section 1R12.1)

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

Mitigating Systems

Significance:  Sep 18, 2015

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Failure to Evaluate the Impact of a FLEX-Related Configuration Change on Available DG Fuel Oil Margin.

A finding of very low safety significance and an associated NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed when the licensee failed to adequately consider the potential impact that a modification would have on the safety-related emergency diesel generator (DG) fuel oil supply credited for design basis events. Specifically, the DG fuel oil system was modified in a manner that reduced the DG fuel oil system train separation from two isolation valves to one isolation valve. The adverse impact of a leaking single isolation valve following the implementation of a diverse and flexible coping capability (FLEX) modification resulted in the IB DG fuel oil transfer pump(s) pumping fuel oil not only into its associated IB DG fuel oil day tank but also into the IA DG diesel oil storage tank (DOST). The safety-related 1B DG fuel oil system was categorized as a low margin system, and the inspectors identified that the licensee did not adequately follow the considerations

provided in the design change process for a low margin system. In addition to entering this issue into their CAP, immediate corrective actions included restoring the fuel oil configuration to the previous dual isolation configuration until long-term corrective actions could be developed.

The inspectors determined that the performance deficiency was more than minor because it was associated with the Mitigating Systems cornerstone attribute of Design Control and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding was of very low safety significance (Green) because the issue did not prevent the 1B DG from being able to operate for its mission time. The finding had a cross-cutting aspect in the Avoid Complacency component of the Human Performance cross-cutting area because the licensee failed to recognize that the configuration change resulted in the licensee operating the DG fuel oil system in a configuration that it had not routinely operated in, exposing previously unidentified deficiencies (H.12).

Inspection Report# : [2015007](#) (*pdf*)

Barrier Integrity

Significance:  Sep 18, 2015

Identified By: NRC

Item Type: VIO Violation

Failure to Analyze RHUT Inlet Piping Loads

The inspectors identified a finding of very low safety significance (Green) and an associated VIO of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," when licensee personnel failed to evaluate the effect of dynamic loads on inlet piping from Unit 1 and Unit 2 residual heat removal (RHR) suction relief valves that discharged to the recycle holdup tank (RHUT). The NRC previously issued two NCVs regarding this issue and corrective actions to date have been incomplete. In addition to entering this issue into their CAP, planned corrective actions included the installation of approximately 20 pipe supports.

The inspectors determined that the performance deficiency was more than minor, because it was associated with the Barrier Integrity Cornerstone attribute of Design Control and adversely affected the cornerstone objective of providing reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, the licensee's existing design and piping configuration had not addressed water hammer effects when the Unit 1 and Unit 2 RHR suction relief valves were aligned to discharge to the RHUT. A ruptured RHUT and/or associated piping outside of containment could adversely affect on-site and offsite dose consequences. An NRC Senior Reactor Analyst (SRA) performed a detailed risk evaluation and determination that the finding was of very low safety significance (i.e., Green). The finding had a cross-cutting aspect in the Resources component of the Human Performance cross-cutting area because leaders at the station did not ensure that personnel, equipment, procedures, and other necessary resources were available and adequate to correct the condition adverse to quality (H.1).

Inspection Report# : [2015007](#) (*pdf*)

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

Emergency Preparedness

Occupational Radiation Safety

Significance:  Jun 30, 2016

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Failure to Comply With Radiation Work Permit Requirements Resulting In An Unplanned Dose Rate Alarm

Green. A finding of very low safety significance and an associated Non-Cited Violation (NCV) of Technical Specification 5.4.1 was self-revealed when an engineer violated a radiation work permit by entering an area that was outside of the scope of the radiation work permit (RWP), which resulted in the engineer receiving an unplanned electronic dosimeter dose rate alarm. After the engineer received the unplanned dose rate alarm, he immediately exited the area and reported the event to the radiation protection staff. The licensee entered this issue into their CAP as IR 02655195.

The inspectors determined that the performance deficiency was more than minor because the finding impacted the Program and Process attribute of the Occupational Radiation Safety Cornerstone, and adversely affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation. Specifically, the engineer, by entering an area that he was not briefed to enter on the radiation work permit, removed a barrier that was intended to prevent workers from receiving unexpected dose. The finding was determined to be of very low safety significance in accordance with Inspection Manual Chapter (IMC) 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," dated August 19, 2008. The violation was determined to be of very low safety significance (Green) because: (1) it did not involve as-low-as-reasonably-achievable (ALARA) planning or work controls; (2) there was no overexposure; (3) there was no substantial potential for an overexposure; and (4) the ability to assess dose was not compromised. The inspectors determined that the finding had a cross-cutting aspect in the Human Performance area of Challenging the Unknown [H.11] because the individual did not stop when faced with an uncertain condition. Specifically, risks were not evaluated and managed before proceeding. (Section 2RS1.6)

Inspection Report# : [2016002](#) (*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 : August 29, 2016