LaSalle 2
4Q/2016 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G May 13, 2016
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Monitor the Fouling Conditions of the CSCS Equipment Area Coolers (Section 1R21.3.b(1)
The team identified a finding of very-low safety significance (Green) and an associated NCV of Title 10, Code of Federal Regulations (CFR), Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to monitor the fouling conditions of the core standby cooling system (CSCS) equipment area coolers. Specifically, the licensee did not develop performance test procedures to assess the fouling conditions of the safety-related CSCS equipment area coolers and did not have acceptance criteria that delineate when to remove accumulations. The licensee captured this issue in their Corrective Action Program (CAP) as Action Request (AR) 02665463 and established a standing order for operations to impose more restrictive service water temperature limits to reasonably assure the operability of the affected coolers until long term corrective actions were implemented to restore compliance.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating System cornerstone attribute of 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. The finding screened as of very low safety significance (Green) because it did not result in the loss of operability or functionality of mitigating systems. Specifically, the licensee reviewed actual service water temperature values measured during the last 12 months, performed an operability evaluation, and concluded that the historical temperatures did not exceed the operability limits established by the operability evaluation. The team did not identify a cross-cutting aspect associated with this finding because it was not confirmed to reflect current performance. Specifically, the test program for the CSCS equipment area coolers was developed in the decade of 1990s. (Section 1R21.3.b(1))

Inspection Report# : 2016007 *(pdf)*

Significance: G May 13, 2016
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Ensure that Both Feed Supply Breakers for Swing DG Components Were Closed During Normal Plant Operation (Section 1R21.3.b(2))
The team identified a finding of very-low safety significance (Green) and an associated NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure to have the capability to verify the supply breakers of both reactor units feeding the swing diesel generator (DG) components were closed during normal plant operation. Specifically, the circuit design and procedures for the swing DG room fan, fuel oil transfer pump, and fuel storage

tank room exhaust fan did not ensure the detection of the condition where one of these feeder breakers was tripped in the open position during normal plant operation. The licensee captured this issue in their CAP as AR 02668759 and created a special log to monitor the associated breakers once per day.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating System cornerstone attribute of 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. The finding screened as of very low safety significance (Green) because it did not result in the loss of system and/or function, represent an actual loss of function of at least a single train or two separate safety systems out-of-service for greater than its Technical Specifications (TS) allowable outage time, and represent an actual loss of function of one or more non-TS trains of equipment designated as high safety-significant for greater than 24 hours. Specifically, a historical review did not find an example where the swing DG was non functional for a period greater than the applicable TS allowable outage time as a result of this finding during the last year. The team did not identify a cross-cutting aspect associated with this finding because it was not confirmed to reflect current performance due to the age of the performance deficiency. Specifically, the mean to detect an opened breaker associated with the affected loads was established more than 3 years ago. (Section 1R21.3.b(2))

Inspection Report# : 2016007 *(pdf)*

Significance: G May 13, 2016
Identified By: NRC
Item Type: NCV Non-Cited Violation
Inadequate Procedures for Containment Debris Management (Section 1R21.4.b(1))
The team identified a finding of very-low safety significance (Green) and an associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to establish procedures that were appropriate to manage containment debris consistent with the emergency core cooling system strainer debris loading design basis and supporting design information. Specifically, the procedures did not contain instructions for evaluating containment debris sources consistent with the associated analyses and other design documents. The licensee captured the team concerns in their CAP as AR 02663076 and AR 02656299. The immediate corrective actions included an operability evaluation that reasonably determined all of the affected emergency core cooling system strainers remained operable.

The performance deficiency was determined to be more than minor because it was associated with the procedure quality attribute of the Mitigating Systems cornerstone, and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding screened as of very-low safety significance (Green) because it did not result in the loss of operability or functionality of mitigating systems. Specifically, the licensee performed an operability review and reasonably determined that only a portion of the unqualified coatings would be available for transport to the strainers and this quantity was bounded by the associated design basis analysis. In addition, this review reasonably determined that sufficient analytical margin existed to accommodate the quantities of the other debris types found during recent inspections. The team did not identify a cross-cutting aspect associated with this finding because it was not confirmed to reflect current performance due to the age of the performance deficiency. Specifically, the associated procedures were established more than 3 years ago. (Section 1R21.4.b(1))
Inspection Report# : 2016007 *(pdf)*

Significance: G May 13, 2016
Identified By: NRC
Item Type: NCV Non-Cited Violation
Alternate Shutdown Procedures Failed to Ensure RCIC MOVs Supply Breakers Were Closed (Section 4OA2.b

(1))
The team identified a finding of very-low safety significance (Green) and associated NCV of the LaSalle County Station Operating License for the failure to ensure that procedures were in effect to implement the alternate shutdown capability. Specifically, the abnormal operating procedures (AOPs) established to respond to a fire at the main control room did not include instructions for verifying that supply breakers for three reactor core isolation cooling motor-operated valves (MOVs) were closed to ensure they could be operated from the remote shutdown panel. Fire-induced failures could result in tripping MOV power supply breakers prior to tripping the MOV control power fuses. The licensee captured the team concerns in their CAP as AR 02668854 and established compensatory actions to reset the affected breakers, if required.

The performance deficiency 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 to prevent undesirable consequences. The finding screened as of very-low safety significance (Green) because it was assigned a low degradation factor. Specifically, the procedural deficiencies could be compensated by operator experience/familiarity and the fact that the AOPs included steps to verify other breakers at the same locations were closed would likely prompt operators to close the remaining breakers. The team determined that this finding had a cross cutting aspect in the area of problem identification and resolution because the licensee failed to take effective corrective actions for a similar issue identified in 2014. Specifically, the resolution of this issue included actions to revise the affected AOPs to include verifying all the reactor core isolation cooling MOVs supplied breakers were closed. However, the licensee failed to include all of the MOVs in the revised AOPs. [P.3] (Section 4OA2.b(1))

Inspection Report# : 2016007 *(pdf)*

Barrier Integrity

Significance: G Jun 30, 2016
Identified By: NRC
Item Type: NCV Non-Cited Violation
Partial-Length Rods Exceeded Burnup Limit in Design Basis Method of Analysis
A finding of very low safety significance and a Severity Level IV non cited violation of Title 10 of the Code of Federal Regulations 50.59, “Changes, Tests, and Experiments,” was discovered by the inspectors for the station's failure to provide a written evaluation for the determination that exceeding the peak burnup limit of 62 GWd/MTU (gigawatt days per metric ton of uranium) for fuel, did not require a license amendment. Specifically, the licensee failed to provide a basis supporting the application of alternate burnup limits to the radiological consequence analysis or alternate source term analysis.

The inspectors determined the finding could be evaluated in accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Phase 1 - Initial Screening and Characterization of findings,” Table 3 for the Barrier Integrity Cornerstone. The inspectors selected this cornerstone as this issue focused on the evaluation of radiological releases postulated as a result of a fuel handling accident and Tables 2’s inclusion of fuel handling under the Barrier Integrity Cornerstone. Table 3 directed entry into 0609 Appendix A, “Significance Determination Process for Findings At-Power.” The inspectors answered “No” to all of the Barrier Integrity screening questions. Therefore, this issue screens as having very low safety significance (Green). Because violations of 10 CFR 50.59 potentially impede or impact the regulatory process, they are dispositioned using the traditional enforcement process. In accordance with Section 6.1.d.2 of the NRC Enforcement Policy, this violation was categorized as Severity Level IV because the finding screened as having very low safety significance. This finding has a cross-cutting aspect in the area of Human

Performance, Design Margins because the licensee did not operate and maintain equipment within design margins.
Inspection Report# : 2016002 *(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Significance: G Jun 30, 2016
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Implement and Maintain Written Procedures Regarding Respirator Fit Testing
A finding of very-low safety significance and associated non-cited violation of Title 10 Code of Federal Regulations, Part 20.1703 was identified by the inspectors on May 11, 2016, for the licensee's failure to implement and maintain written procedures regarding respirator fit testing. These issues were entered into the licensee's corrective action program as action request 2668632. Corrective actions included invalidating the results for the observed test, removing the qualification from the technician that performed the tests, reaffirmed the procedure requirements with all technicians through a read and sign process, and requested several changes to the Fit Test Procedure RP-AA-444 "Controlled Negative Pressure Fit Testing" Revision 5 to improve alignment to requirements in 29 CFR 1910.134, Appendix A, "Fit Testing Procedures (Mandatory)."

The inspectors determined that not consistently performing fit tests in accordance the methods described in 29 Code of Federal Regulations 1910.134, Appendix A, was a performance deficiency, the failure of which was reasonably within the licensee's ability to foresee and prevent. This performance deficiency was determined to be more than minor, because it was associated with program and process attribute of the Occupational Radiation Safety cornerstone and affected its objective to ensure adequate protection of the worker health and safety from exposure to radiation from radioactive material during routine civilian nuclear reactor operation. Specifically, the respirator fit testing was being used to certify respirator protection factors of workers which were relied upon to provide protection of workers and any discrepancy affected the licensee's ability to control and limit radiation exposures from airborne sources. In accordance with Inspection Manual Chapter 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," the inspectors determined that the finding had very-low safety significance (Green) because the finding did not involve: (1) as-low-as-is-reasonably- achievable planning and controls, (2) a radiological overexposure, (3) a substantial potential for an overexposure, or (4) a compromised ability to assess dose. The inspectors determined that the performance characteristic of the finding that was the most significant causal factor of the performance deficiency was associated with the cross-cutting aspect of Human Performance, Resources. Specifically, leaders ensure that personnel equipment, procedures, and other resources are available and adequate to support nuclear safety.
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 : February 01, 2017