U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

La Salle 1 – Quarterly Plant Inspection Findings

4Q/2017 – Plant Inspection Findings

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Initiating Events

Significance: G Mar 31, 2017
Identified By: NRC
Item Type: NCV Non-Cited Violation
Inadequate Controls for ASME Code VT-3 Internal Examination of Pumps and Valves
The inspectors identified a finding of very low safety significance with an associated non-cited violation of Title 10 of the Code of Federal Regulations (CFR), Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," because the licensee failed to establish a procedure that ensured the American Society of Mechanical Engineers (ASME) Code VT-3 examination of the internal surface of valves or pumps occurred in the as found condition (e.g., prior to repairs). Consequently, the licensee repaired internal damage to the 2B33-F067B valve prior to the Code VT-3 examination which potentially resulted in an ineffective VT-3 examination. The licensee entered this issue into their corrective action program as Action Request 3972620, initiated actions to complete another VT-3 examination of valve 2B33-F067A or valve 2B33-F067B during the current outage and was evaluating additional controls for scheduling VT-3 internal examinations of pumps and valves.

The performance deficiency was determined to be more than minor because it affected the Initiating Events cornerstone attribute of equipment performance and adversely affected 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, if left uncorrected, this finding would lead to a more significant safety concern because it increased the likelihood of a an operational challenge to the plant caused by a recirculation system line break initiated from undetected service induced defects left in service inside pumps or valves as a result of ineffective VT-3 examinations. The finding was screened in accordance with Inspection Manual Chapter 0609, Appendix A, and the inspectors answered "No" to the applicable Phase 1 Initiating Events Screening question because the finding did not result in a reactor trip and/or loss of mitigation equipment relied upon to transition the plant from the onset of the trip to a stable shutdown condition. Therefore, this finding was determined to have very low safety significance (Green). The finding had a cross cutting aspect of Work Management in the Human Performance cross cutting area, because licensee

managers failed to establish an adequate process of planning, controlling, and executing work activities such that nuclear safety is the overriding priority as evidenced by the lack of appropriately controls for scheduling the VT-3 internal examination of the 2B33-F067B valve (Inspection Manual Chapter (IMC) 310, Item H.5).

Inspection Report# : 2017001 *(pdf)*

Mitigating Systems

Significance: G Nov 08, 2017
Identified By: NRC
Item Type: NCV Non-Cited Violation
Inadequate Maintenance Rule Monitoring of the Low Pressure Core Spray System

The inspectors identified a Green non-cited violation (NCV) of Title 10 of the *Code of Federal Regulation* (CFR) 50.65 (a)(1) for the failure to monitor the performance of the Unit 1 low pressure core spray system against licensee-established goals. Specifically, the licensee did not identify and properly account for a maintenance rule functional failure of the Unit 1 low pressure core spray system min-flow valve differential pressure switch, which demonstrated that performance of the Unit 1 low pressure core spray system was not being controlled in accordance with the maintenance rule. The Licensee?s immediate corrective actions included entering this issue into their corrective action program, re-evaluating and classifying the low pressure core spray system min-flow valve differential pressure switch failure as a maintenance rule functional failure, and entering the system into (a)(1) status. This finding was entered into the licensee?s corrective action program as action request 4029999.

The performance deficiency was determined to be more-than-minor in accordance with IMC 0612 Appendix B, ?Issue Screening,? dated September 7, 2012, because it was associated with the Equipment Performance 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. Specifically, the licensee did not properly classify the May 17, 2017, failure of the low pressure core spray system min-flow valve differential pressure switch as a maintenance rule functional failure. When properly classified, this failure caused the maintenance rule performance criteria for the low pressure core spray system to be exceeded?causing the system to receive additional remedial station attention. In accordance with IMC 0609, Attachment 4, ?Initial Characterization of Findings,? issued October 16, 2016, and Exhibit 2 of IMC 0609, Appendix A, ?The Significance Determination Process (SDP) for Findings At-Power,? dated June 19, 2012, the inspectors determined that this maintenance rule program-based finding is of very low safety significance (Green) since it was not a deficiency affecting the design or qualification of a mitigating structure, system, or component, it did not represent the loss of a system and/or function, it did not 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 allowed outage time, and it did not represent an actual loss of a non-technical specification equipment designated as high safety-significant in accordance with the licensee?s maintenance rule program for greater than 24 hours. The inspectors determined this finding affected the cross-cutting area of Problem Identification and Resolution in the aspect of Evaluation, where the organization thoroughly evaluates issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance. Specifically, the Licensee failed to thoroughly evaluate the failure of the Unit 1 low pressure core spray system min-flow valve differential pressure switch on May 17, 2017.

Inspection Report# : 2017003 *(pdf)*

Significance: G Jul 14, 2017
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Correctly Evaluate/Justify Post-Accident Operability Qualification for the Reliance Motor 1(2) VY03C RHR Pumps Room Cooling Fan (Section 1R21.3.b(1))
Green. The inspectors identified a finding of very-low safety significance and an associated NCV of Title 10 of the Code of Federal Regulations (10 CFR) Part 50.49, Paragraph (f)(4), for the licensee's failure to provide adequate analysis in combination with partial type test data to qualify an Environmental Qualification (EQ) component. Specifically, EQ-LS068 failed to provide adequate analysis to justify the Post-Accident Operability Qualification for the Reliance Electric motor utilized for 1(2)VY03C. The EQ Binder incorrectly relied on test values that was strictly performed for thermal aging (for normal plant conditions) to justify a Post-Accident Qualification. The licensee captured the inspectors' concern into their Corrective Action Program (CAP) as Action Request (AR) 04030532.

The performance deficiency was determined to be more-than-minor because it was associated with the Mitigating Systems cornerstone attribute of design control and affected the cornerstone objective of ensuring the availability, reliability, and capability of mitigating systems to 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, as an immediate corrective action, the licensee performed a preliminary assessments and concluded that the motors could be EQ qualified for the environmental conditions for which they could be exposed. The finding was associated with a cross cutting aspect in the area of Human Performance, Design Margin. [H.6] (Section 1R21.3.b(1))

Inspection Report# : 2017008 *(pdf)*

Significance: G Jul 14, 2017
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to have Adequate Justification for Extending the life of Lubricant used in EQ Motor Bearings (Section 1R21.3.b(2))
Green. The inspectors identified a finding of very-low safety significance and an associated NCV of 10 CFR Part 50.49, Paragraph (j), "Environmental Qualification of Electrical Equipment Important to Safety for Nuclear Power Plants," for the licensee's failure to have adequate justification for extending the service-life for grease used in the bearing for EQ motors installed in harsh environment. Specifically, the licensee extended the bearing grease qualified service life for several EQ motors installed in Zone H4A, H6 and H5A from 31.5, 20.5 and 19.5 years respectively to 60 years based on incorrect assumptions. The justification for 60 years extension incorrectly assumed that the calculated service-life was based on continuous operation of the motor. The licensee captured the inspectors' concern into their CAP as AR 04030538.

The performance deficiency was determined to be more-than-minor because it was associated with the Mitigating Systems cornerstone attribute of design control and affected the cornerstone objective of ensuring the availability, reliability, and capability of mitigating systems to 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, as an immediate corrective action, the licensee performed a preliminary evaluation that concluded that the grease remained qualified based on test data which showed that the grease consistency remained within acceptable range during the thermal age test. The finding did not have a cross-cutting aspect associated with it because it was not representative of current performance. (Section 1R21.3.b(2))

Inspection Report# : 2017008 *(pdf)*

Significance: G Jun 30, 2017
Identified By: NRC
Item Type: FIN Finding
Failure to Implement a Preventive Maintenance Strategy for 1B RHR Low Pressure Permissive Pressure Switch
An NRC identified, Green Finding was identified for the failure to implement a preventive maintenance strategy for the 1B residual heat removal injection valve low pressure permissive switch in accordance with procedure ER-AA-200-1001, "Equipment Classification," Revision 3. The switch failed and was replaced on February 18, 2017. The performance deficiency was documented in the licensee's corrective action program.

The inspectors determined that the performance deficiency was more than minor because it was associated with the Mitigating System Cornerstone attribute of equipment performance and adversely 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 the inoperability of an emergency core cooling system train of equipment. In accordance with IMC 0609.04, "Initial Characterization of Findings," and Exhibit 2 of IMC 0609, Appendix A, "The Significance Determination Process for Findings At Power," issued June 19, 2012, the inspectors determined that this finding is of very low safety significance because all the screening questions associated with IMC 0609, Appendix A, Exhibit 2, were answered "No." The switch was replaced and returned to service within 24 hours of when it was initially identified as a problem. This finding did not have a cross cutting aspect because the performance deficiency was not indicative of current licensee performance.

Inspection Report# : 2017002 *(pdf)*

Significance: G Mar 31, 2017
Identified By: Self-Revealing
Item Type: NCV Non-Cited Violation
Failure to Perform Preventive Maintenance Resulted in Stem to Disc Separation of Safety Related Valve
A finding of very low safety significance and an associated non-cited violation of Title 10 of the Code of Federal Regulations, Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self revealed for the licensee's failure to ensure that activities affecting quality were prescribed in a manner appropriate to the circumstances for the Unit 2 Division 3 diesel generator system. Specifically, the licensee's processes for the control and administration of preventive maintenance (ER-AA-200/WC-AA-120) failed to ensure that the safety related 2E22-F319, 2B diesel generator cooling water strainer backwash valve, was replaced or refurbished at a frequency that would prevent corrosion related stem to disc separation. The licensee entered this issue into their corrective action program as action report 1122320. Corrective actions planned and completed included replacement of the 2E22-F319 valve with a stainless steel design and performing an apparent cause evaluation of the degraded condition.

The performance deficiency was more than minor, and thus a finding, because it was associated with the Mitigating Systems Cornerstone attribute of equipment performance 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.) Specifically, the failure to perform preventive maintenance on the 2E22-F319 valve resulted in a degraded condition which adversely affected the reliability of the high pressure core spray (HPCS) system to respond to an initiating event. The inspectors evaluated the finding using the significance determination process in accordance with Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process for Findings At Power," Exhibit 2, dated June 19, 2012. The inspectors reviewed the Mitigating Systems screening questions in Exhibit 2 and answered "No" to question A.1, "If the finding is deficiency affecting the design or qualification of a

mitigating SSC, does the SSC maintain its operability or functionality". The inspectors answered "Yes" to question A.2, "Does the finding represent a loss of system and/or function;" therefore, a detailed risk evaluation was required. The detailed risk evaluation determined that the finding screened as having very low safety significance (Green). This finding had a cross cutting aspect in the area of Problem Identification & Resolution, Resolution, because the organization failed to take effective corrective actions to address issues in a timely manner commensurate with their safety significance (P.3).
Inspection Report# : 2017001 *(pdf)*

Barrier Integrity
Emergency Preparedness
Occupational Radiation Safety
Public Radiation Safety
Security

The security cornerstone is an important component of the ROP, which includes various security inspection activities the NRC uses to verify licensee compliance with Commission regulations and thus ensure public health and safety. The Commission determined in the staff requirements memorandum (SRM) for SECY-04-0191, "Withholding Sensitive Unclassified Information Concerning Nuclear Power Reactors from Public Disclosure," dated November 9, 2004, that specific information related to findings and performance indicators associated with the security cornerstone will not be publicly available to ensure that security-related information is not provided to a possible adversary. Security inspection report cover letters will be available on the NRC Web site; however, security-related information on the details of inspection finding(s) will not be displayed.

Miscellaneous

Current data as of : February 01, 2018

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