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## La Salle 1 – Quarterly Plant Inspection Findings

### 2Q/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 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:**  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:**  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*)

**Significance:**  Dec 31, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

**Failure to Perform Required Monthly Fire Extinguisher Inspections per National Fire Protection Association Code**

The inspectors identified a finding of very low safety significance with an associated NCV of the LaSalle County Station Unit 1 and Unit 2 operating licenses, NFP-11, Section 2.C.(25), "Fire Protection Program," and NFP-18, Section 2.C.(15), "Fire Protection Program," respectively, for the licensee's failure to meet the inspection requirements of National Fire Protection Association (NFPA) 10-1975 for portable fire extinguishers. Specifically, from October 10, 2011, to January 9, 2017, the licensee failed to perform inspections on portable fire extinguishers in high radiation areas on the required monthly frequency, including some fire extinguishers that were in place in case of a fire in safety-related areas, such as outside emergency core cooling system pump rooms. The licensee entered this issue into the Corrective Actions Program as Action Request 02739987. Licensee's corrective actions include completion of an evaluation which provided a technical justification for a deviation from the monthly inspection requirements of NFPA-10.

The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems cornerstone attribute of protection against external factors, including fire, and affected the cornerstone objective of ensuring the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, had a fire occurred in one of the affected fire zones containing safety-related mitigation equipment (e.g., RHR pump room) and a licensee responder attempted to use an extinguisher that may not be functional due to an unknown degraded condition allowed to exist because monthly checks were not performed, the fire could progress further and render the mitigating system inoperable. The finding was screened as very low safety significance (Green) because the fire finding was associated with portable fire extinguishers not used for hot work fire watches. The inspectors determined that this finding affected the cross-cutting area of human performance in the aspect of documentation where the organization creates and maintains complete, accurate and up to date documentation. Specifically, the licensee failed to ensure that procedures governing the monthly inspection of portable fire extinguishers contained accurate information regarding the use of a deviation from NFPA-10.

Inspection Report# : 2016004 (*pdf*)

**Significance:**  Dec 31, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

**Failure to Provide Sufficient Guidance for the Successful Troubleshooting of Safety-Related Equipment**

The inspectors identified a finding of very low safety significance with an associated NCV of Title 10 of the Code of Federal Regulations (CFR), Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to provide procedural guidance of a type appropriate to the circumstances. Specifically, licensee procedure MA-AA-716-004, "Conduct of Troubleshooting," Revision 13, did not prescribe appropriate quantitative or qualitative acceptance criteria for determining whether a failed component existed in the 1VY03C control circuit (a safety-related component) using the simple troubleshooting methods outlined by the procedure. The licensee entered this issue into the CAP as ARs 02680921 and 02722425. Corrective actions included revision of the MA-AA-716-004 procedure to include instructions that drove more thorough troubleshooting activities, as recommended by an internal fleet assessment documented in AR 02516457.

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 licensee concluded troubleshooting on fan 1VY03C without correcting the degraded condition which adversely affected the reliability of the fan to automatically start in response to an initiating event. The finding screened as of very low safety significance (Green) because the finding was not a deficiency affecting the design or qualification of a mitigating system, structure and component (SSC), did not represent a loss of system or function, did not represent an actual loss of function of a train for greater than the TS allowed outage time and did not represent a loss of function of a non-TS train of equipment. The inspectors determined this finding affected the cross-cutting area of problem identification and resolution in the aspect of operating experience where the organization systematically and effectively collects, evaluates, and implements relevant internal and external operating experience in a timely manner. Specifically, the licensee failed to ensure evaluation and implementation of internal operating experience in a timely manner after a fleet wide issue concerning less than adequate troubleshooting was entered in the CAP.

Inspection Report# : 2016004 (*pdf*)

**Significance:**  Dec 31, 2016

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

### **Failure to Perform Preventive Maintenance Resulting in Two Subsequent Unit 1 RCIC Turbine Trips During Surveillance Testing**

A finding of very low safety significance with an associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed when the licensee failed to perform preventive maintenance on the Unit 1 reactor core isolation cooling (RCIC) electronic governor-remote (EG-R) actuator. Specifically, from June 4, 1993, to November 17, 2016, the licensee's processes for the control and administration of preventive maintenance failed to ensure that the Unit 1 RCIC EG-R actuator was replaced or refurbished on an interval that would prevent internal fouling of the EG-R actuator from adversely affecting governor performance. As a result, contaminants and degradation accumulated in the EG-R actuator from January 16, 2004, to November 17, 2016, ultimately causing the RCIC turbine to trip during quarterly surveillance testing on October 18, 2016, and again on November 17, 2016. The licensee entered this issue into the CAP as ARs 02729757 and 02742254. Corrective actions planned and completed included replacing the Unit 1 and Unit 2 RCIC EG-Rs and performing a root 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 Unit 1 RCIC

EG-R resulted in a degraded condition which adversely affected the reliability of the system to respond to an initiating event. A detailed risk evaluation determined that the finding screened as having very low safety significance (Green). This finding did not have a cross cutting aspect because the performance deficiency was not indicative of current licensee performance.

Inspection Report# : 2016004 (*pdf*)

**Significance:**  Dec 31, 2016

Identified By: NRC

Item Type: FIN Finding

### **Block Wall Evaluations Not Consistent with As-Built Condition**

The inspectors identified a finding of very-low safety significance when licensee personnel failed to ensure that the design inputs used in block wall evaluations for determination of their seismic capacities were consistent with the conditions as built or as specified in the design documents. Specifically, the material properties and wall configurations used in the analyses were not consistent with the as-built conditions. The evaluations were a part of the licensee's response to the NRC Request for Information Pursuant to 10 CFR, Part 50.54(f) regarding Recommendation 2.1: Seismic, of the Near Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident. The performance deficiency did not impact the operability or functionality of the walls and was captured in the licensee's CAP under ARs 2712569, 2711669, 2711877, 2710850, 2711337 and 2711875, with actions to revise the affected calculations.

The performance deficiency was more than minor, and thus a finding because it was associated with the Mitigating Systems cornerstone attribute of protection against external factors 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 licensee's failure to determine and use correct design inputs adversely impacted the evaluations of block walls required for protection of the components attached to or located in proximity of the walls, and needed to support implementation of the diverse and flexible coping strategies. The finding screened as having very-low safety significance (Green) because the finding did not result in the loss of operability or functionality of any affected structures, systems, and components. The inspectors determined this finding affected the cross-cutting area of human performance in the aspect of field presence where senior managers ensure supervisory and management oversight of work activities, including contractors and supplemental personnel. Specifically, the licensee failed to provide supervisory and management oversight for the activities of the contractor performing the block wall evaluations.

Inspection Report# : 2016004 (*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 : September 05, 2017

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