Summer
2Q/2014 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Jun 30, 2014
Identified By: NRC
Item Type: FIN Finding
Failure to Develop Adequate Post Modification Testing for the Alternate Seal Injection System
An NRC-identified FIN was identified for the failure of the licensee to accomplish station procedures for development, review, and performance of adequate post modification testing of the alternate seal injection (ASI) system. The problem is in the licensee's CAP as CR 13-00642.

The inspectors determined that the failure to accomplish station procedures to develop, review and implement adequate post modification testing in accordance with station procedures was a PD, and was within the licensee's ability to foresee and correct based on their existing knowledge of ASI designs at other plants. The inspectors reviewed IMC 0612 and determined the PD is more than minor and therefore a finding because if left uncorrected it would have the potential to result in a more significant safety event. Specifically, loss of the ASI system would lead to a reactor coolant pump seal loss of coolant accident during those events involving a loss of normal seal cooling such as a station blackout or fire. The inspectors reviewed IMC 0609, Attachment 4 and Appendix A, for the significance determination and determined the finding was of very low safety significance, or Green, because it did not involve a design deficiency and was not an actual loss of function. The inspectors reviewed IMC 0310 for cross-cutting aspects and determined the cause of the finding involved the area of human resources and the aspect of H.11, challenge the unknown, because the licensee did not identify the appropriate post modification testing when using a, first-for-the-station, ASI design. (Section 4OA5.1)

Inspection Report# : 2014003 *(pdf)*

Significance: G Mar 31, 2014
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Declare the 'A' Safety Injection Pump Inoperable and Enter TS 3.5.2 Action a (Section 1R12)
The NRC identified a NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to enter TS 3.5.2, Action a, due to inoperability of the 'A' charging/safety injection (SI) pump during periods when its room cooler was out of service, as required by SAP-209, "Operability Determination Process," Revision 1. The issue was entered into the licensee's CAP as condition report CR-14-00778
The inspectors determined that the failure to declare the 'A' SI pump inoperable and enter the respective TS 3.5.2, Action a, when the necessary support room cooler was incapable of performing its function, as required by SAP-209 is a performance deficiency (PD). The inspectors reviewed Inspector Manual Chapter (IMC) 0612 and determined the PD is more than minor because, if left uncorrected, it would have had the potential to lead to a more significant safety concern in that the failure to identify and monitor an applicable technical specification action statement could lead to

plant operations outside of TS analyzed conditions. The inspectors reviewed IMC 0609, Attachment 4, Initial Characterization of Findings, dated June 19, 2012, and Appendix A – Exhibit 2, The Significance Determination Process (SDP) for Findings At-Power, dated June 19, 2012, and determined the finding was of very low safety significance or Green because the system was not inoperable in excess of the TS allowed outage time. Since the original TS interpretation allowing removal of the SI pump room cooler from service was from 1997, this issue is not indicative of current performance and therefore no cross-cutting aspect is assigned.
Inspection Report# : 2014002 *(pdf)*

Significance: G Mar 31, 2014
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Promptly Identify and Correct a Condition Adverse to Quality for an Inboard Bearing Oil Leak on the 'A' CCW Pump
The NRC identified a NCV of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to promptly identify and correct a condition adverse to quality (CAQ) involving an inboard bearing oil leak on the 'A' component cooling water (CCW) pump. The issue was entered into the licensee's corrective action program (CAP) as Condition Report CR-13-03733.
The inspectors determined that the failure to promptly identify and correct the CAQ for the 'A' CCW pump's inboard bearing oil leak was a performance deficiency (PD). The inspectors reviewed Inspector Manual Chapter (IMC) 0612, Appendix B, "Issue Screening", dated September 7, 2012, and determined the PD was more than minor and therefore a finding, because it affected the Mitigating Systems cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences and the respective attribute of equipment performance. Specifically, an in-service train of CCW was declared inoperable due to a large oil leak that could have depleted all available oil for inboard bearing lubrication within a short time period. The inspectors reviewed IMC 0609, Attachment 4, Initial Characterization of Findings, dated June 19, 2012, and Appendix A – Exhibit 2, "The Significance Determination Process (SDP) for Findings At-Power", dated June 19, 2012, and determined the finding was of very low safety significance or Green because the finding was not a design deficiency or loss of function. The cause of the finding involved the cross-cutting area of problem identification and resolution and the aspect of resolution, P.3, because the licensee failed to take effective corrective actions commensurate with an issue's safety significance in that they failed to promptly identify and correct an 'A' CCW pump inboard bearing oil leak that was a CAQ.
Inspection Report# : 2014002 *(pdf)*

Significance: G Nov 22, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Design the Safety-related Chiller Modification to Appropriate Quality Standards
Green: The team identified a non-cited violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to review the application of design processes prescribed for the heating, ventilation, and air conditioning (HVAC) system chillers for suitability, to assure that appropriate quality standards were specified and included in design documents, and to ensure that deviations from such standards were controlled. This was a performance deficiency. The licensee entered this issue into their corrective action program as condition reports 13-04803, 13-04804, and 13-04665. The licensee performed an operability evaluation and determined the 'A' chiller was inoperable with the two remaining operable chillers providing compliance with technical specifications.

The performance deficiency was more than minor because it was associated with the Design Control attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective of ensuring availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to establish adequate design control measures that required the review of applicable design processes for

suitability resulted in a failure to meet specified quality objectives, which decreased the availability and reliability of the 'A' chiller. The team determined the finding to be of very low safety significance (Green) because although the finding was a deficiency affecting the design of a mitigating system, structure, or component which failed to maintain its operability, it did not represent a loss of the system function or a single train for greater than its technical specification allowed outage time. The HVAC system remains operable with the two remaining chillers, 'B' and 'C', in operation. The team determined the finding involved the cross-cutting aspect of supervisory and management oversight, within the Work Practices component of Human Performance area which states that, "the licensee ensures supervisory and management oversight of work activities, including contractors, such that nuclear safety is supported." Specifically, V. C. Summer management did not ensure management oversight of work activities that provided for the administration of quality assurance necessary to support nuclear
safety. [H.4(c)] (Section 1R17.b.i)

Inspection Report# : 2013008 *(pdf)*

Significance: G Nov 22, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Prevent a Water Hammer Event in the RBCU SW Discharge Piping
Green: The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to verify the adequacy of design to prevent water hammer on the reactor building cooling unit (RBCU) service water (SW) return lines following a potential design basis accident and a delayed closure of SW valves 3107A/B. This was a performance deficiency. The licensee entered this issue into their corrective action program as condition reports 13-04877 and 13-05139. The licensee restricted the alignment of SW to the RBCUs during normal plant operation until changes to procedures or additional control circuit interlocks between 3107A/B and the service water booster pump (SWBP) could be implemented to mitigate the consequences of a delayed closure of the valves.

The performance deficiency was more than minor because it was associated with the Structures, Systems and Components and Barrier Performance attribute of the Barrier Integrity cornerstone and affected the cornerstone objective to provide reasonable assurance that physical design barriers (i.e. containment) protect the public from radionuclide releases caused by accident or events. Specifically, startup of the SWBP following a delayed closure of 3107A/B would cause a water hammer event on the RBCU SW return lines inside containment. The water hammer loads would challenge SW piping and/or valve integrity and could compromise containment isolation. The team determined the finding to be of very low safety significance (Green) because the finding did not represent an actual open pathway in the physical integrity of reactor containment, containment isolation system, or heat removal components, and it did not involve a reduction in function of hydrogen igniters in the reactor containment. No cross-cutting aspect was assigned to this finding because the team determined that the cause of the finding was not indicative of current licensee performance. (Section 1R17.b.ii)

Inspection Report# : 2013008 *(pdf)*

Significance: G Nov 01, 2013
Identified By: NRC
Item Type: FIN Finding
Failure to Meet Training Program Standards on Job Performance Measures for the Annual Licensed Operator Requalification Operating Examination (Section 1R11.1)

Inspection Report# : 2013010 *(pdf)*

Significance: G Nov 01, 2013
Identified By: NRC
Item Type: FIN Finding
Failure to Meet Training Program Standards for the Biennial Licensed Operator Requalification Written Examination (Section 1R11.2)

Inspection Report# : 2013010 *(pdf)*

Significance: G Nov 01, 2013
Identified By: NRC
Item Type: FIN Finding
Failure to Meet Training Program Standards for Administration of the Annual Licensed Operator Requalification Operating Examination (Section 1R11.3)

Inspection Report# : 2013010 *(pdf)*

Significance: G Sep 30, 2013
Identified By: NRC
Item Type: FIN Finding
Failure to develop adequate corrective action for a condition adverse to quality involving the loss of the alternate AC transformer
The inspectors identified a Green finding of licensee procedure, SAP-999, "Corrective Action," Revision 11 for the failure to develop corrective actions for a Level 3 condition report (CR) which described a condition adverse to quality (CAQ) associated with the loss of transformer, XTF-5052, alternate AC source.

The inspectors determined that the failure to develop corrective actions for a Level 3 CR as required by their corrective action program (CAP) procedure was a performance deficiency (PD). The inspectors reviewed inspector manual chapter (IMC) 0612 and determined the PD is more than minor and therefore a finding because it adversely impacted the Mitigating Systems cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences and the respective attribute of equipment performance. Specifically, a system component, XTF-5052, associated with recovery of an offsite power circuit and installed to reduce core damage frequency, was rendered unavailable. The inspectors reviewed IMC 0609, Attachment 4, and Appendix A – Exhibit 2, and determined the finding was of very low safety significance or Green because the finding was not a design deficiency or a loss of function during a required alignment per Technical Specifications. The inspectors reviewed IMC 0310 and determined the cause of the finding involved the cross-cutting area of problem identification and resolution, the component of corrective action program, and the aspect of appropriate corrective actions, P.1(d), because the licensee failed to develop corrective actions for the Level 3 CR associated with the loss of XTF5052. (Section 4OA2.3)

Inspection Report# : 2013004 *(pdf)*

Significance: G Sep 30, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to adequately evaluate new fire hoses for post-loss coolant accident conditions.
The NRC inspectors identified a NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to adequately accomplish engineering services procedure, ES-0419, "Equal To/Better Than

(ETBT) Evaluation Process," Revision 9, for new fire hoses located in the reactor building. The issue was entered into the licensee's CAP as condition report CR-12-05730.

The inspectors determined that the failure to adequately accomplish ES-0419 for new fire hoses in the reactor building was a PD. The inspectors reviewed IMC 0612 and determined that the PD is more than minor and therefore a finding because if left uncorrected it would have the potential to lead to a more significant safety concern in that degradation of the fire hoses in post loss of coolant accident (LOCA) conditions would adversely impact the emergency core cooling system (ECCS) containment sump screens. The inspectors reviewed IMC 0609, Attachment 4, and Appendix A – Exhibit 2, and determined the finding was of very low safety significance or Green because the finding was not a design deficiency or represented a loss of function. Specifically, the inspectors identified the problem prior to the licensee incurring actual risk exposure time. The inspectors reviewed IMC 0310 and determined the cause of the finding involved the cross-cutting area of human performance, the component of resources, and the aspect of adequate emergency equipment, H.2(d), because the licensee failed to ensure the new fire hoses would not impact safety-related components such as ECCS sump screens during post-LOCA conditions. (Section 4OA5.2)

Inspection Report# : 2013004 *(pdf)*

Barrier Integrity

Significance: G Jun 30, 2014
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Accomplish Procedure to Determine Cause and Correct Failures of Reactor Building Spray System Relief Valve
An NRC-identified NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for the licensee's failure to accomplish a general test procedure, GTP-302, requirement to determine the cause and correct the conditions leading to two failures of reactor building spray system relief valve, XVR03026-SP. The licensee entered the problem into their corrective action program (CAP) as condition report (CR) 14-03079.

The licensee's failure to accomplish GTP-302 to determine and correct the cause of failures occurring in 2006 and 2012 was a performance deficiency (PD) which was within their ability to foresee and correct based on the available vendor documentation. The inspectors reviewed IMC 0612, "Power Reactor Inspection Reports," Appendix B, and determined the PD was more than minor and therefore a finding, because it affected the Barrier Integrity cornerstone objective to provide reasonable assurance that physical design barriers such as containment protect the public from radionuclide releases caused by accidents or events and the respective attribute of human performance because the availability and reliability of XVR03026-SP was not ensured by a failure to accomplish procedure requirements to determine the cause of two previous failures and correct. The inspectors evaluated the finding in accordance with NRC IMC 0609, "Significant Determination Process," attachment 4 and appendix A, and determined that the finding was of very low safety significance, Green, because it did not represent an actual physical open pathway in containment. The inspectors reviewed IMC0310, "Aspects Within the Cross-cutting Areas," and determined the cause of the finding involved the cross-cutting area of problem identification and resolution and the respective aspect of complete and thorough evaluation, P.2, because the licensee failed to determine the cause of the relief valve failures for adequate corrective actions. (Section 4OA2.4)
Inspection Report# : 2014003 *(pdf)*

Significance: G Dec 31, 2013

Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Procedure for Control of containment Penetrations
An NRC-identified Green non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings,"was identified for the licensee's failure to prescribe an adequate procedure for control of temporary containment penetration devices. The violation is in the licensee's corrective action program as condition report 13-00739.

The inspectors determined that the failure to have an adequate procedure for control of temporary containment penetration devices was a performance deficiency (PD). The PD is more than minor and therefore a finding because it impacted the barrier integrity cornerstone objective to provide reasonable assurance that physical design barriers such as the containment, protect the public from radionuclide releases caused by accidents or events and the attribute of procedure quality because the affected procedure allowed the use of silicone foam in configurations which did not provide adequate pressure retention capabilities. The inspectors evaluated the finding in accordance with NRC Inspection Manual Chapter 0609, "Significant Determination Process," attachment 4, appendix G, and appendix H and determined that an analysis was required by a senior reactor analyst. A regional SRA performed an SDP assessment of this finding. The licensee containment penetration testing and results were reviewed as well as the licensee's risk evaluation. The conclusion was that the finding represented a condition B finding which would only impact large early release fraction (LERF) and not core damage frequency. The test results showed that the finding would not meet the leakage criteria necessary for the finding to be >GREEN per NRC IMC 0609 Appendix H. The conditions necessary to achieve the leakage criteria were determined to be <1E-7 for LERF which represented a GREEN finding of very low safety significance. There are no cross-cutting aspects because the finding was not representative of current licensee performance. (Section 4OA5.2)
Inspection Report# : 2013005 *(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Significance: G Sep 30, 2013
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to evaluate readiological conditions
A Green, self-revealing, NCV was identified for the failure to perform radiological surveys required by 10 CFR 20.1501(a) to ensure the potential radiological hazards and extent of radiation levels were understood and controlled before disassembling pressurizer spray valve PCV-444C. The issue was entered in the licensee's CAP as CR-12-05132.

The inspectors determined that the failure to perform radiological surveys required by 10 CFR 20.1501(a) was a PD. The inspectors determined that the PD was more than minor because it 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 in that the licensee failed to adequately evaluate potential radiological hazards that could be present in a work area. The finding was assessed using the Occupational Radiation Safety significance determination process and was determined to be of very low safety significance (Green) because it was not an ALARA planning issue, there was no overexposure nor substantial potential for an

overexposure, and the licensee's ability to assess dose was not compromised because the workers were wearing electronic dosimetry that was remotely monitored and intermittent on-site HP coverage was provided. This finding had a crosscutting aspect associated with human performance, work control, H.3(a). When licensee personnel failed to identify potential changes in expected radiological conditions and incorporate those changes into the RWP requirements prior to beginning work on valve PCV-444C, appropriate radiological work controls were not established. (Section 2RS1)

Inspection Report# : 2013004 *(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

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