

## Summer 4Q/2014 Plant Inspection Findings

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### Initiating Events

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### Mitigating Systems

**Significance:** G Nov 07, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Failure to Follow Procedures for Scaffolding and Special Orders for 10CFR50.59 Screenings/Evaluations**

The team identified a Green non-cited violation of technical specification (TS) 6.8.1, Procedures and Programs, for the licensee's failure to follow procedure requirements to perform 10CFR50.59 screenings/evaluations on scaffolding and special orders for approximately 97 scaffolds that existed in the plant for greater than 90 days at power operation and four special orders that provided guidance to the operations department outside normal routines. In response to this issue, the licensee initiated condition reports (CR) CR-14-05650, CR-14-05692, CR-14-05694, CR-14-05695, CR-14-05696, CR-14-05766, and CR-14-05446. The licensee performed an immediate operability determination in CR-14-05446 and determined potentially affected equipment remained operable.

The team determined that the performance deficiency was more than minor because it affected the Design Control attribute of the Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the team identified multiple examples where the licensee failed to evaluate temporary changes to the facility in accordance with station procedures, which could affect the availability, reliability, and capability of systems that respond to events. The team determined the finding to be of very low safety significance (Green) because it was not a design deficiency, did not represent the loss of system safety function, and did not represent a loss of function of TS or Non-TS equipment. The team determined the finding was indicative of present licensee performance, and was associated with the cross-cutting aspect of Procedure Adherence, in the area of Human Performance. Specifically, the licensee failed to screen temporary plant changes as required by procedures. [H.8] (Section 1R21.2)

Inspection Report# : [2014007](#) (*pdf*)

**Significance:** G Nov 07, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Failure to Follow Failure to Follow Corrective Action Program Procedures**

The team identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to follow station procedures to perform operability/functionality evaluations for condition reports (CRs)

that affected structures, systems, and components (SSCs). Specifically, the licensee failed to properly screen, evaluate, and document operability or functionality determinations for six CRs that affected SSCs. Following identification by the team, the licensee generated CR3 14-05700 and CR-14-05676. The licensee subsequently evaluated the six CRs, determined there were no impacts on the operability of the affected SSCs, and updated the CRs to include operability determinations.

The team determined that the performance deficiency was more than minor, because if left uncorrected, it had the potential to lead to a more significant safety concern. Specifically, the licensee failed to perform operability/functionality reviews for CRs with administrative issues of concern that affected SSCs and that could result in safety-related SSCs being inoperable and remain undetected for a period of time. The team determined the finding to be of very low safety significance (Green) because it was not a design deficiency, did not represent the loss of system safety function, and did not represent a loss of function of technical specification (TS) or Non-TS equipment. The team determined the finding was indicative of present licensee performance and was associated with the crosscutting aspect of Identification, in the area of Problem Identification and Resolution.

Specifically, the licensee did not identify issues completely, accurately, and in a timely manner in accordance with the program. [P.1] (Section 1R21.2)

Inspection Report# : [2014007](#) (*pdf*)

**Significance:**  Nov 07, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

### **Instrument Uncertainties Result in Non-Conservative Values In EOP-2.2 & ARP-001-XCP-612; RWST Swapover**

The team identified a Green non-cited violation NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to consider instrument uncertainties when determining refueling water storage tank (RWST) setpoints and associated time critical operator actions in procedures to perform RWST swapover. Specifically, the licensee failed to consider instrument uncertainties associated with the control room annunciator 'RWST Empty' alarm at 6% with respect to the critical vortex level and second, the RWST indicated level of 10% at which pumps would be secured in emergency operating procedures (EOPs). Following identification by the team, the licensee generated CR-14-05792, CR-14-05869, and CR-14-05868 to address the finding. The licensee also revised procedure EOP-2.2, "ES-1.3, Transfer to Cold Leg Recirculation," to Rev. 17. The licensee performed an operability determination and concluded that the safety injection system was operable but degraded.

The team determined that the performance deficiency was more than minor because it affected the Design Control attribute of the Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee failed to consider uncertainties associated with the level alarms and level indicators for the RWST, and as a result, impacted the availability, reliability, and capability of the ECCS to respond to initiating events. The team determined the finding to be of very low safety significance (Green) because it was a deficiency affecting the design or qualification of a mitigating structures, systems, and components (SSC), and the SSC maintained its operability or functionality. The team determined that no cross-cutting aspect was applicable because the finding was not indicative of present licensee performance. (Section 1R21.2)

Inspection Report# : [2014007](#) (pdf)

**Significance:** G Aug 22, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

### **Degraded Emergency Feedwater System Piping Supports**

An NRC-identified non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, Corrective Action, for the licensee's failure to identify and correct conditions adverse to quality. Specifically, inspectors determined the licensee failed to identify three degraded emergency feedwater (EF) system piping supports during the May 27, 2014, water hammer post transient event walkdown. These included one upstream of the turbine driven EF pump discharge check valve XVC01016-EF (EFH-4018), one downstream of the turbine driven EF pump discharge valve, XVG01036-EF (EFH-0050), and one downstream of the 'C' SG turbine driven EF pump supply stop check valve, XVK0120C-EF (EFH-5048) during a routine plant walkdown.

Failure to identify three damaged pipe supports as conditions adverse quality during a previous licensee evaluation for the water hammer event was a performance deficiency. This finding was more than minor because it adversely impacted the Mitigating Systems cornerstone objective to ensure the availability, reliability, and capability of systems that respond to external events (such as seismic) to prevent undesirable consequences. Specifically, these damaged piping supports resulted in a condition where there was a reasonable doubt on the operability of the EF system. Subsequently, the licensee performed pipe stress calculations and concluded that the EF system was degraded, but operable. In accordance with Manual Chapter 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," a significance determination screening was performed and determined this finding was of very low safety significance (Green) because it was not a design or qualification deficiency, and did not represent an actual loss of system safety function. This finding had a cross-cutting aspect in the area of human performance resource because the licensee did not have an approved plant procedure to support the piping walk-downs post water hammer event. H.1 of IMC 0310.

Inspection Report# : [2014008](#) (pdf)

**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 40A5.1)

Inspection Report# : [2014003](#) (pdf)

**Significance:**  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:**  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)

## Barrier Integrity

**Significance:**  Nov 07, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to Account for Containment Temperature Measurement Uncertainty**

The team identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to account for instrument uncertainty on the containment bulk average temperature instrumentation used in calculation DC00020-005, "Steam Generator Replacement Reactor Building Temperature/Pressure – LOCA," Rev. 6, Status A. Specifically, the licensee (1) failed to consider instrument uncertainty when verifying compliance with technical specification (TS) containment operability and design basis accident analysis; and (2) failed to consider instrument drift for reactor building resistance temperatures devices when calibration was not performed for 21 years. Following identification by the team, the licensee generated CR-14-05864, CR-14-05897, and CR-14-05888. The licensee performed an operability determination and determined the temperature monitoring system was operable with interim actions. The licensee revised procedure OAP-106.1, "Operating Rounds," Rev. 16e to incorporate the instrument uncertainty identified in the operability determination.

The team determined that the performance deficiency was more than minor because it was associated with the Configuration Control attribute of the Barrier Integrity Cornerstone, and adversely affected the cornerstone objective to ensure that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, by not accounting for the instrument uncertainty on the containment bulk average temperature instrumentation, the containment temperature could unknowingly exceed the design basis and TS operability limit. The team determined the finding to be of very low safety significance (Green) because it did not result in an open pathway in containment and did not involve hydrogen igniters. The team determined that no cross-cutting aspect was applicable because the finding was not indicative of present licensee performance. (Section 1R21.2)  
Inspection Report# : [2014007](#) (*pdf*)

**Significance:**  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*)

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## Emergency Preparedness

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## Occupational Radiation Safety

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## Public Radiation Safety

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## 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.

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## Miscellaneous

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