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## **Callaway – Quarterly Plant Inspection Findings**

### **2Q/2017 – Plant Inspection Findings**

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#### **Initiating Events**

#### **Mitigating Systems**

**Significance:** G Jun 30, 2017

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

#### **Failure to Follow Motor Control Center Procedure**

The inspectors reviewed a self-revealed, non-cited violation of Technical Specification 5.4.1.a, "Procedures," for the licensee's failure to follow Procedure MPE ZZ QS001, "Cleaning and Inspection of Motor Control Centers," Revision 34. On May 2, 2017, the licensee failed to ensure contactors operated freely per step 7.6.8 during reassembly of motor control center NG08F for the essential service water cooling tower bypass valve EFHV0066. As a result, one division of the essential service water system was rendered inoperable for approximately 57 hours and was only discovered when valve EHFV0066 failed to operate during a periodic surveillance test on May 3, 2017. As immediate corrective actions, the licensee replaced the starter assembly under Job 17001973, completed the test, and restored the system to operable status on May 4, 2017. The licensee entered this issue into the corrective action program under Condition Report 201702418.

Failure to follow Procedure MPE ZZ QS001 was a performance deficiency. This performance deficiency was more than minor, and therefore a finding, because it adversely affected the configuration 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, one division of the essential service water system was rendered inoperable for approximately 57 hours and was only discovered when valve EHFV0066 failed to operate during a periodic surveillance test. Using Inspection Manual Chapter 0609, Attachment 4, "Initial Characterization of Findings," and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012, the inspectors determined the finding was of very low safety significance (Green) because (1) the finding was not a deficiency affecting the design or qualification of a mitigating system; (2) the finding did not represent a loss of system and/or function; (3) the finding did not represent an

actual loss of function of a single train for greater than its technical specification allowed outage time; and (4) the finding does not represent an actual loss of function of one or more non technical specification trains of equipment designated as high safety significant in accordance with the licensee's maintenance rule program for greater than 24 hours. Specifically, the total duration of inoperability was approximately 57 hours which is less than the allowed completion time of 72 hours for this system. The finding had a cross cutting aspect in the area of human performance associated with challenge the unknown because the licensee failed to stop when faced with uncertain conditions. Specifically, the maintenance technician encountered resistance when manually operating the contactors, signed off the step as complete, and later rationalized the decision with the supervisor after completing the work.  
Inspection Report# : 2017002 (*pdf*)

**Significance:**  Sep 30, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

**Failure to Maintain Simulator Fidelity**

The inspectors identified a non-cited violation of 10 CFR 55.46(c), "Plant-Referenced Simulators," for failure of the licensee to ensure that the plant-referenced simulator demonstrated expected plant response to transient and accident conditions to which the simulator is designed to respond. Specifically, the licensee failed to ensure simulator modeling of the control rod motor generator sets was consistent with the actual plant, introducing the potential for negative operator training. Due to the licensee not considering 1989 vendor design input on how long the control rod motor generator sets would keep control rod drive mechanisms energized after their input breakers were opened, the simulator was modeled to keep control rods withdrawn approximately two minutes longer (maximum case) than they would have been withdrawn. The licensee documented their corrective actions for this issue in Condition Report 201503621. Failure of the licensee's simulator staff to ensure that the plant-referenced simulator demonstrated expected plant response to transient and accident conditions for which the simulator was designed to respond is a performance deficiency. The performance deficiency is more than minor because it adversely impacts the human performance 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. Using NRC Inspection Manual Chapter 0609, Appendix I, "Licensed Operator Requalification Significance Determination Process (SDP)," dated December 6, 2011, the finding was determined to have very low safety significance (Green) because there was no actual event at the plant where inappropriate actions were taken in the control room based on training with incorrectly modeled components in the simulator. This finding has no cross-cutting aspect assigned because the cause was not indicative of current licensee performance.

Inspection Report# : 2016003 (*pdf*)

**Significance:**  Jun 30, 2016

Identified By: NRC

Item Type: VIO Violation

**Failure to Promptly Correct Conditions Adverse to Quality**

The inspectors identified a cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," associated with the licensee's failure to take timely corrective action for a previously identified condition adverse to quality. Specifically, the licensee failed to adequately resolve water hammer and corrosion issues that were previously identified by the NRC as non-cited violation 05000483/2010006-01 and the failure to resolve these issues resulted in subsequent safety-related equipment failures. The licensee performed an operability determination that established a reasonable expectation of operability pending implementation of corrective actions. The licensee entered this issue into their corrective action program as Callaway Action Request 201604440.

The licensee's failure to take timely and adequate corrective actions to correct a condition adverse to quality was a performance deficiency. The performance deficiency is more than minor, and therefore a finding, because it is

associated with the equipment performance attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to correct water hammer and corrosion issue resulted in the licensee declaring safety-related room coolers and chillers inoperable until an analysis of system operability was completed. This affected their capability to respond to initiating events to prevent undesirable consequences Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," dated June 19, 2012, inspectors determined that this finding was of very low safety significance (Green) because the finding: (1) was not a deficiency affecting the design and qualification of a mitigating structure, system, or component, and did not result in a loss of operability or functionality, (2) did not represent a loss of system and/or function, (3) did not represent an actual loss of function of at least a single train for longer than its allowed outage time, or two separate safety systems out-of-service for longer than their technical specification allowed outage time, and (4) does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant for greater than 24 hours in accordance with the licensee's maintenance rule program. This finding has a cross-cutting aspect of resources in the human performance area because the licensee did not ensure that personnel, equipment, procedures, and other resources were available and adequate to support nuclear safety. Specifically, by failing to address water hammer and corrosion issues, station management failed to ensure that the essential service water system was available and adequately maintained to respond during a loss of off-site power event [H.1].

Inspection Report# : 2016002 (*pdf*)

## **Barrier Integrity**

### **Emergency Preparedness**

**Significance:** N/A Jun 30, 2017

Identified By: NRC

Item Type: NCV Non-Cited Violation

#### **Failure to Analyze the Effect of Changes to Maintaining the Gaitronics System**

The inspectors identified a Severity Level IV non cited violation for the licensee's failure to perform an analysis of a change to processes supporting the emergency preparedness program that demonstrated the change did not reduce the effectiveness of the emergency plan in accordance with the requirements of 10 CFR 50.54(q)(3). There were no immediate safety concerns associated with this violation because less than 10 percent of the public address speakers were determined to be degraded or non functional. This issue has been placed in the licensee's corrective action system as Condition Report 201702343.

The failure to perform an analysis of the effect of changes in processes supporting emergency preparedness is a performance deficiency within the licensee's ability to foresee and correct. The finding was more than minor because the finding was associated with the Facilities and Equipment Cornerstone attribute and adversely affected the Emergency Preparedness Cornerstone objective. The finding was assessed using traditional enforcement because the licensee's failure to perform a required analysis impacted the regulatory process. The finding was evaluated using the NRC's Enforcement Policy, dated November 1, 2016, Section 6.6(d), and was determined to be a Severity Level IV violation because the violation did not affect radiological assessment or offsite notification. Traditional enforcement violations are not assessed for cross-cutting aspects.

Inspection Report# : 2017002 (*pdf*)

## **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 : August 03, 2017

*Page Last Reviewed/Updated Wednesday, August 10, 2016*