

## Surry 1 1Q/2015 Plant Inspection Findings

---

### Initiating Events

---

### Mitigating Systems

**Significance:** G Sep 26, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

#### **Failure to Perform Required Preventative Maintenance on Class 1E Molded Case Circuit Breakers**

The team identified a Green non-cited violation of Technical Specification 6.4.A.7, “Unit Operating Procedures and Programs,” for the licensee’s failure to implement written procedures to perform periodic tests for the Class 1E 125 volt direct current thermal-magnetic molded case circuit breakers (MCCBs). The licensee entered the issue into their corrective action program as condition reports CR558445 and CR560488 and performed an immediate determination of operability, in which they determined that the MCCBs were operable but not fully qualified.

The licensee’s failure to conduct periodic tests to detect the deterioration of the system and to demonstrate that components not exercised during normal operation of the station are operable, as required by IEEE 308-1970, Section 6.3, was a performance deficiency. The performance deficiency was determined to be more than minor because, if left uncorrected, it had the potential to lead to a more significant safety concern. Specifically, absent testing to detect deterioration and to demonstrate continued operability, the likelihood that these MCCBs will unpredictably fail when called upon increases with time in service. The team used Inspection Manual Chapter 0609, Att. 4, “Initial Characterization of Findings,” issued June 19, 2012, for Mitigating Systems, and Inspection Manual Chapter 0612, App. A, “The Significance Determination Process (SDP) for Findings At-Power,” issued June 19, 2012, and determined the finding to be of very low safety significance (Green) because the finding was a deficiency affecting the design or qualification of a mitigating structure, system, or component, which maintained its operability or functionality. The team determined that no crosscutting aspect was applicable because the finding was not indicative of current licensee performance. (Section 1R21.2b.i)

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

**Significance:** G Sep 26, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

#### **Failure to Evaluate the Range of Conditions that Effect Canal Level Probes**

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 properly evaluate and quantify

the system response times and accuracies over the range of conditions under which the service water canal level probes must operate. The licensee entered the issue into their corrective action program as condition report CR558429 and performed an immediate determination of operability, in which they determined the canal level probes to be operable but not fully qualified.

The licensee's failure to evaluate conditions that affected system response times and accuracy of the canal level probes, as required by IEEE 279-1968, Section 4.1, was a performance deficiency. The performance deficiency was determined to be more than minor because it was associated with the Protection Against External Factors attribute of the Mitigating Systems Cornerstone 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, response time delays could allow the canal water level to fall below Technical Specification limits reducing the available heat removal required to mitigate Updated Final Safety Analysis Report chapter 14 design basis accidents. The team used Inspection Manual Chapter 0609, Att. 4, "Initial Characterization of Findings," issued June 19, 2012, for Mitigating Systems, and Inspection Manual Chapter 0612, App. A, "The Significance Determination Process (SDP) for Findings At-Power," issued June 19, 2012, and determined the finding to be of very low safety significance (Green) because the finding was a deficiency affecting the design or qualification of a mitigating structure, system, or component, which maintained its operability or functionality. The team determined that the finding was associated with the Design Margin cross-cutting aspect of the Human Performance area because recent modification designs for the canal probes were completed and approved without evaluating effects on the canal level probe response times and accuracies. [H.6] (Section 1R21.2b.ii).

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

---

## **Barrier Integrity**

---

## **Emergency Preparedness**

---

## **Occupational Radiation Safety**

---

## **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

Last modified : June 16, 2015