

Vogtle 2

3Q/2014 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2014

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Inadequate Maintenance Procedures and Usage Results in a Failed MFRV and an Automatic Reactor Trip

Green. A self-revealing NCV of 10 CFR 50 Appendix B Criterion V, "Instructions, Procedures, and Drawings," was identified for failure to provide adequate work instructions as well as failure to follow the maintenance procedure used to install flexible and rigid conduit. Specifically, the work instructions did not provide adequate directions and/or precautions to properly slope conduit during installation to prevent water intrusion into a valve positioner. The work instructions referenced maintenance procedure 25008-C, "Flexible and Rigid Conduit Installation." The maintenance procedure referenced Vogtle design specification X3AR01 Section E-8, "Raceway Systems," which provided sloping and tightness criteria for conduit installations. The licensee conducted a root cause investigation and entered the event into their corrective action program (CR 797929). The licensee repaired the improperly sloped conduit, replaced the positioner, and revised procedure 25008-C to specify standards for proper sloping of conduits.

The finding was more than minor because it was associated with the procedure quality and human performance attributes of the reactor safety - initiating events cornerstone and it 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, the failure to provide adequate work instructions as well as failure to follow procedure 25008-C, "Flexible and Rigid Conduit Installation," resulted in the Unit 2 loop 3 main feedwater regulating valve (MFRV) positioner failing closed, causing a subsequent automatic reactor trip due to low-low steam generator (SG) water level. Because the inspectors answered "No" to all of the IMC 0609 Appendix A (dated June 19, 2012) Exhibit 1, Section B, "Initiating Events Screening Questions," the inspectors concluded that the finding was of very low safety significance (Green). The inspectors determined that the finding had a cross-cutting aspect of "procedure adherence" in the human performance area because the maintenance electricians did not follow Vogtle design specification procedures or drawings resulting in the improper sloping of the MFRV flexible conduit [H.8] (Section 40A3)

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

Mitigating Systems

Barrier Integrity

Emergency Preparedness

Significance: **W** Jun 30, 2014

Identified By: Licensee

Item Type: VIO Violation

Calculation Error Results in Significantly Non-Conservative EAL Threshold Values

White: A finding and associated violation of 10 CFR 50.54(q)(2) was identified by the licensee for the failure to follow and maintain the effectiveness of emergency plans which use a standard emergency classification and action level scheme. Specifically, the licensee's emergency plan emergency action level (EAL) Category R – Abnormal Radiological RG1 (General Emergency) and RS1 (Site Area Emergency) specified threshold values which were sixty times too high due to a calculation error. As immediate corrective action, the licensee provided the corrected threshold values to appropriate management and decision-makers (shift managers/emergency directors). The licensee entered this issue into the corrective action program as CR 648248.

The performance deficiency was determined to be more than minor because it was associated with the emergency preparedness cornerstone attribute of procedure quality. It impacted the cornerstone objective because it was associated with inappropriate EAL and emergency plan changes and their adequacy to protect the health and safety of the public in the event of a radiological emergency. Specifically, the licensee's ability to declare a Site Area Emergency and General Emergency based on effluent radiation monitor values was degraded in that event classification using these radiation monitors would be delayed. The finding was assessed for significance in accordance with NRC Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process," which states, "Failure to comply means that a program is noncompliant with a Regulatory requirement." The inspector determined that the issue of concern constituted a degraded rather than lost risk-significant planning standard (RSPS). The issue of concern was similar to the example in Table 5.4.1 (Degraded RSPS) and was determined to be of low to moderate safety significance (White). The violation was determined to meet the IMC 0305 criteria for enforcement discretion as an old design issue. A cross-cutting aspect was not assigned based on the elapsed time since the performance deficiency occurred and because the inspectors determined it was not reflective of current licensee performance. (Section 40A2)

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

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

Occupational Radiation Safety

Public Radiation Safety

Significance: **G** Sep 30, 2014

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Loss of Plant Effluent Monitoring Capability

Green: A self-revealing NCV of TS 5.5.4, "Radioactive Effluent Controls Program," occurred when the licensee failed to maintain continuous, representative monitoring of the Unit 2 plant vent gaseous effluents as required by the offsite dose calculation manual (ODCM) for approximately ten days, between March 16 and March 26, 2014. The licensee entered the event in the corrective action program as CR 8284999, and took immediate corrective actions to establish continuous monitoring of the Unit 2 plant vent gaseous effluents. Corrective actions planned, completed, or under evaluation include, changes to the vent sampling procedure, impact assessment on ODCM requirements, departmental stand downs to share lessons learned, work control process changes for equipment tagouts, and training.

The performance deficiency was more than minor because it was associated with the public radiation safety cornerstone attribute of plant facilities, equipment and instrumentation availability and adversely impacted the cornerstone objective of ensuring adequate protection of public health and safety from exposure to radioactive materials released into the public domain. This finding was assessed for significance using IMC 0609, Appendix D, “Public Radiation Safety Significance Determination Process,” issued February 12, 2008, and determined it to be of very low safety significance because the licensee was able to assess the dose to the public by correlating other plant radiation monitoring equipment and programs to demonstrate this dose was less than the values in Appendix I to 10 CFR Part 50 and/or 10 CFR 201301(e). This finding had a cross-cutting aspect of “identification” in the problem identification and resolution area because the licensee failed to recognize the impact a loss of vacuum indication had on the operability of 2RE12444 (the continuous monitoring equipment) completely, accurately, and in a timely manner [P1].

Inspection Report# : [2014004](#) (*pdf*)

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 : November 26, 2014