

Vogtle 2 2Q/2015 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Jun 30, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Identify and Correct Degraded Foreign Material Cover Plates for the NSCW Pump Wells

An NRC-identified, Green non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion XVI, “Corrective Action,” was identified for the licensee’s failure to identify and correct conditions adverse to quality associated with the cover plates for the nuclear service cooling water (NSCW) system pumps’ shaft well access openings. Specifically, the licensee failed to identify degraded conditions on the NSCW pump well cover plates (e.g. openings from uncovered holes and degraded periphery) that could result in foreign material (FM) entering the pumps’ well and impact cooling water flow to safety related heat exchangers. The licensee entered the issue into their corrective action program (CAP) under CR10033287, CR10085803 and CR10091171, installed temporary FM exclusion covers, and removed debris near the pump cover wells.

The finding was more than minor because, if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, the openings in the degraded pump well covers could allow FM to enter the NSCW system and adversely affect cooling water flow to essential component coolers. The finding was evaluated using the mitigating systems cornerstone column of Attachment 4 and Exhibit 2 of Appendix A to Inspection Manual Chapter 0609, “Significance Determination Process,” (SDP) dated April 29, 2015. The finding was of very low safety significance (i.e. Green) because the inspectors answered “No” to all of the screening questions in the exhibit. The inspectors determined the finding had a cross-cutting aspect of “Evaluation” in the Problem Identification and Resolution (PI&R) area because the organization did not thoroughly evaluate the NSCW debris-blocking event of the 1B safety injection (SI) lube oil (LO) cooler, in February 27, 2015, to ensure that resolutions addressed causes and extent of conditions commensurate with their safety significance (P.2). (Section 1R12)

Inspection Report# : [2015002](#) (*pdf*)

Significance: G Mar 31, 2015

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Failure to Implement Maintenance Procedure for Containment Spray Pump

A self-revealing NCV of TS 5.4.1.a, “Procedures,” was identified for the licensee’s failure to verify that the total indicated run-out (TIR) for the Unit 2 ‘B’ train containment spray pump was within the limits of procedure 27052-C, Gould 3415 Pump Maintenance Procedure, Ver. 6.0. This violation was entered into the licensee’s corrective action program as CR 855892.

The failure to implement maintenance procedure 27052-C was a performance deficiency. The performance deficiency was more than minor because it was associated with the SSC and Barrier Performance attribute of the Barrier Integrity

cornerstone and adversely affected the cornerstone objective in that the failure to verify the 2B CS pump shaft TIR was within the procedural and vendor recommendation limits affected the CS system availability and reliability. 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 inspectors determined that the cause of the finding was not indicative of current licensee performance.

Inspection Report# : [2015001](#) (*pdf*)

Significance:  Dec 31, 2014

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Failure to Correctly Implement Control Rod Drive System Procedure During Reactor Startup Activities

A self-revealing non-cited violation (NCV) of Technical Specification (TS) 5.4.1.a, “Procedures,” was identified for the licensee’s failure to implement system operating procedure SOP 13502-2, “Control Rod Drive and Position Indication System,” version 42, when resetting the control rod drive system bank overlap unit (BOU). This caused an out-of-sequence control rod insertion that resulted in operators manually tripping the reactor. The licensee correctly reset the BOU prior to restarting the unit and enhanced the procedural guidance for resetting the BOU. The violation was entered into the licensee’s corrective action program as condition report (CR) 879125.

The performance deficiency (PD) was more than minor because it was associated with the Configuration Control and Equipment Performance attributes of the Mitigating Systems cornerstone and adversely affected the cornerstone objective in that improper rod control system equipment lineup affected the licensee’s ability to control reactivity. The finding screened as Green because the finding did not affect reactor protection system trip capability or result in an unintentional positive reactivity addition. The inspectors determined the finding had a cross-cutting aspect of “training” in the human performance area because the organization had not provided sufficient practical or hands-on training on resetting the BOU. [H.9]

Inspection Report# : [2014005](#) (*pdf*)

Significance:  Dec 31, 2014

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Restore Nuclear Service Cooling Water Manual Valves to their Required ‘Locked-Open’ Position

The NRC identified an NCV of TS 5.4.1.a, “Procedures” for the licensee’s failure to properly implement administrative control procedure 10019-C, “Control of Safety Related Locked Valves,” version 15.3. As a result, two nuclear service cooling water (NSCW) manual valves were not in their required ‘locked-open’ position. The licensee restored the valves to their ‘locked-open’ position. The violation was entered into the licensee’s corrective action program as condition report 880824.

The performance deficiency was more than minor because it was associated with the Equipment Performance and Configuration Control attributes of the Mitigating Systems cornerstone and adversely affected the cornerstone objective in that the throttled position of the valves reduced the cooling capability of the associated mitigating systems heat exchangers and the unsecured condition reduced the safety-related locked valve program’s objective to control and maintain the configuration of valves required to be in a specified position. The finding screened as Green because the flow rates associated with the valves’ throttled position were determined to be sufficient to maintain the supported systems operability. The inspectors determined the finding had a cross-cutting aspect of “documentation” in the human performance area because the organization provided inaccurate documentation of the valves’ manipulation log

sheet. [H.7]

Inspection Report# : [2014005](#) (*pdf*)

Significance: **G** Dec 31, 2014

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Failure to Follow Procedures Renders Safety Related Battery Charger Inoperable

A self-revealing NCV of TS 5.4.1.a, “Procedures” was identified for the licensee’s failure to properly implement approved maintenance procedures and work order instructions and inadvertently removed the 2AD1CB safety-related battery charger from service while attempting to perform routine battery surveillance on the 2CD1B battery. Upon discovery, the licensee immediately stopped the work and returned the battery charger to service. The licensee entered the condition into their corrective action program as CR 10002493.

The performance deficiency was more than minor because it was associated with the equipment performance attribute of the mitigating systems cornerstone and adversely affected the cornerstone objective in that the opening of the power supply breaker to the incorrect battery charger (2AD1CB) resulted in the charger being inoperable for a total of 30 minutes. The inspectors evaluated the finding using IMC 0609, Appendix A, “The Significance Determination Process (SDP) for Findings At-Power,” issued June 19, 2012. Since the inspectors answered “No” to all of the Exhibit 2, Mitigating Systems Screening Questions, the inspectors concluded that the finding was (Green).The inspectors determined the finding had a cross-cutting aspect of “Challenge the Unknown” in the Human Performance area because the station operator proceeded in the face of uncertainty. [H.11]

Inspection Report# : [2014005](#) (*pdf*)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Significance: **W** Dec 31, 2014

Identified By: Self-Revealing

Item Type: VIO Violation

Shipment of a Type B quantity of RAM in a Type A Container

A self-revealing, preliminary White, AV of Technical Specification (TS) 5.4.1., Procedures, occurred on June 24, 2014, when a Type A shipping cask containing Type B radioactive waste (spent resin) was shipped by Southern Nuclear Operating Company (SNC) from the Vogtle

Electric Generating Plant (VEGP), Units 1 and 2, to the Energy Solutions radioactive waste processing facility located in Barnwell, South Carolina. The serial number of the High Integrity Container (HIC) containing the spent resin was not verified when it was removed from its storage process shield and placed in the shipping cask, with the result that a HIC with a Type B quantity of resin was transported in a Type A shipping cask. This error resulted in multiple violations of NRC and Department of Transportation (DOT) regulations, which are included in Enclosure 2. The licensee entered the event in the corrective action program (CAP) as condition report (CR) 831652. Immediate corrective actions included suspension of radioactive waste shipments at Southern Nuclear Operating Company (SNC) facilities, and requalification of plant Vogtle radioactive shippers and oversight personnel.

The licensee's failure to document the location of radioactive waste stored in the process shields, as required by licensee procedure 46111-C, "Storage of Radwaste in Outdoor Process Shields," was a performance deficiency (PD). The PD was more than minor because it was associated with the public radiation safety cornerstone attribute of Program & Process (transportation program), and adversely impacted the cornerstone objective of ensuring adequate protection of public health and safety from exposure to RAM released into the public domain. A Type B quantity of material left the licensee's facility and entered the public domain in an inadequate (Type A) container. The inspectors determined this finding has a cross-cutting aspect of in the Documentation component of the Human Performance area, because the licensee did not create and maintain complete, accurate, and up-to-date documentation used in preparing shipments of radioactive waste.

The NRC performed a supplemental inspection to assess the adequacy of the licensee's evaluation, extent of condition/cause review and associated corrective actions. The inspectors determined that the licensee performed an adequate evaluation of the specific performance issue and that comprehensive corrective actions were completed to address each of the specific causes.

(IR# 05000424, 425/2015009 dated September 15, 2015)

Inspection Report# : [2014009](#) (*pdf*)

Inspection Report# : [2015009](#) (*pdf*)

Significance:  Sep 30, 2014

Identified By: Self-Revealing

Item Type: NCV Non-Cited 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

Significance: N/A Apr 03, 2015

Identified By: NRC

Item Type: FIN Finding

Biennial PI&R Summary

The inspectors concluded that, in general, problems were properly identified, evaluated, prioritized, and corrected. The licensee was effective at identifying problems and entering them into the corrective action program (CAP) for resolution, as evidenced by the relatively few number of deficiencies identified by external organizations (including the NRC) that had not been previously identified by the licensee, during the review period. Generally, prioritization and evaluation of issues were adequate, formal root cause evaluations for significant problems were adequate, and corrective actions specified for problems were acceptable. Overall, corrective actions developed and implemented for issues were generally effective and implemented in a timely manner.

The inspectors determined that overall, audits and self-assessments were adequate in identifying deficiencies and areas for improvement in the CAP, and appropriate corrective actions were developed to address the issues identified. Operating experience usage was found to be generally acceptable and integrated into the licensee’s processes for performing and managing work and plant operations.

Based on discussions and interviews conducted with plant employees from various departments, the inspectors determined that personnel at the site felt free to raise safety concerns to management and use the CAP to resolve those concerns.

Inspection Report# : [2015008](#) (*pdf*)

Last modified : September 30, 2015