

Vogtle 2

4Q/2011 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Dec 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Human Performance Error Results in Inoperability of TDAFW Pump

• Green: A Green self-revealing non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” was identified. Specifically, the licensee inadvertently operated the Unit 2 turbine driven auxiliary feedwater (TDAFW) pump with the suction source isolated. As a result, the TDAFW pump operated with no suction source for a period of 1 minute 20 seconds and was rendered inoperable for a period of approximately 22 hours. The licensee immediately secured the pump when suction and discharge pressures became erratic and unstable. The licensee performed an engineering evaluation and assessment to ensure the pump was not damaged as a result of running the pump with the suction valves closed. The licensee entered this issue into their corrective action program (CAP) as CR 358773.

This issue was more than minor because it adversely affected an objective of the Mitigating Systems cornerstone. Specifically, the performance deficiency affected the availability, reliability, and capability of the Unit 2 TDAFW pump to provide secondary decay heat removal. The finding was determined to be Green because the event did not represent an actual loss of safety function of a single train for greater than its technical specification (TS) allowed outage time. The inspectors determined that the cause of this finding was related to the Work Practices component of the Human Performance cross-cutting area due to less-than-adequate human error prevention techniques [H.4(a)]. Specifically, procedural place keeping techniques were less than adequate.

Inspection Report# : [2011005](#) (*pdf*)

Significance:  Dec 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to ensure Unit 1 and Unit 2 reactor coolant process variables can be maintained within those predicted for a loss of normal ac power for a large main control room fire.

Green: A Green NRC identified NCV of Unit 1 Operating License Condition 2.G and Unit 2 Operating License Condition 2.G for failure to implement and maintain in effect all provisions of the approved Fire Protection Program (FPP) as described in the FSAR for the facility. Specifically, the licensee failed to ensure that, during post-fire safe shutdown, Unit 1 and Unit 2 reactor coolant process variables would be maintained within those predicted for a loss of normal ac power. The licensee entered this issue into their corrective action program (CAP) as Condition Report (CR) 2010112114.

The finding was determined to be more than minor because it was associated with the Reactor Safety Mitigating Systems cornerstone attribute of protection against external factors (i.e. fire) and it affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences.

The inspectors determined that this performance deficiency did not have a cross-cutting aspect because it did not represent current licensee performance.

Inspection Report# : [2011005](#) (*pdf*)

Significance: G Sep 30, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Installation of non-conforming safety-related breakers due to a failure to implement corrective action to prevent recurrence to address a significant condition adverse to quality

An NRC-identified Green NCV of 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Action, was identified for failure to develop and implement adequate corrective action to prevent recurrence (CAPR) in response to a significant condition adverse to quality (SCAQ) associated with E-MAX safety-related breaker front cover mounting screws. The licensee performed a field walk-down of all installed E-MAX breakers and identified a total of six breakers that had been inadvertently installed with the top right-hand front cover plate screw not removed. The licensee immediately removed the suspect screws and implemented corrective actions to address future E-MAX breaker installations. The licensee entered this issue into their corrective action program (CAP) as CR 332562.

The finding was considered more than minor because it impacted the Reactor Safety Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences and affected the cornerstone attribute of equipment performance. Specifically, the inadequate corrective action allowed for the installation of non-conforming safety-related breakers that incurred unplanned unavailability to implement the associated temporary modification and also decreased reliability during the time the breaker was in-service without the temporary modification installed. The inspectors determined that the cause of this finding was related to the Corrective Action Program component of the Problem Identification and Resolution cross-cutting area due to the licensee's failure to take appropriate corrective actions to address safety issues in a timely manner, commensurate with their safety significance and complexity [P.1(d)]. (Section 40A2.2)

Inspection Report# : [2011004](#) (*pdf*)

Significance: G Mar 31, 2011

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Depressurization of main firewater header

A self-revealing NCV of Vogtle Unit 1 operating license condition 2.G. and Vogtle Unit 2 operating license condition 2.G. was identified for failure to maintain the main firewater header pressurized. Specifically, in response to two firewater header low

pressure alarms, operations personnel failed to perform the steps listed in the alarm response procedure. This led to the inadvertent depressurization of the main firewater header. Once the licensee became aware of the system depressurization, the shift supervisor directed an operator to start the available jockey pump, and within a few minutes system pressure was restored. This event was entered into the licensee's corrective action program as CR 2010113782.

The finding is considered more than minor because it is associated with external events attribute of the Mitigating Systems cornerstone. Specifically, the performance deficiency adversely affected the protection against external events (fire) attribute of the Mitigating Systems cornerstone objective to ensure the availability and reliability of systems that respond to initiating events to prevent undesirable consequences. Both the Phase 1 and Phase 2 screening worksheets of IMC 0609, Appendix F, indicated that the violation was potentially greater-than-green. The regional Senior Reactor Analyst completed a Phase 3 evaluation. This evaluation concluded that the violation was of very low safety significance (Green). The inspectors determined that the cause of this finding was related to the Decision-Making component of the Human Performance cross-cutting area due to operators using non-conservative assumptions in their decision making. [H.1(a)] (Section 40A5.2)

Inspection Report# : [2011002](#) (*pdf*)

Significance: G Mar 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to perform general visual examination of containment metallic liner in reactor vessel cavity underneath the reactor vessel

The NRC identified a Green NCV of 10 CFR Part 50.55a, “Codes and Standards,” for the licensee’s failure to conduct a general visual examination of the Units 1 and 2 containment metallic liner around the reactor cavity underneath the reactor vessel. The licensee took corrective actions to conduct the required visual examinations in Unit 1, including ultrasonic testing (UT) thickness measurements to evaluate the condition of the liner, and initiated action items to examine the same area in Unit 2 during the next refueling outage. The licensee initiated Condition Report (CR) 2011104688 to address the issue through the Corrective Action Program (CAP) and conducted the required general visual inspection in Unit 1 containment and found no pitting or cracking in the area examined. In addition, the licensee performed UT thickness measurements in affected areas of the metallic liner to evaluate the liner thickness against the design criteria

The licensee’s failure to conduct a general visual examination of the containment metallic liner in the reactor cavity area underneath the reactor vessel in accordance with the American Society of Mechanical Engineers (ASME) Code, Section XI, Subsection IWE was a performance deficiency. The finding was more than minor because it was associated with the Design Control attribute of the Barrier Integrity Cornerstone and affected the cornerstone objective in that visual inspections of the containment metallic liner were not performed to provide reasonable assurance that the liner remained capable of performing its intended safety function. The finding was of very low safety significance (Green) because the finding did not represent an actual open pathway in the physical integrity of the reactor containment. The finding has a cross-cutting aspect in the operating experience (OE) component of the area of problem identification and resolution because OE was not implemented and institutionalized through station procedures. [P.2.b] (Section 1R08)

Inspection Report# : [2011002](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

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