

Vogtle 2

1Q/2008 Plant Inspection Findings

Initiating Events

Significance:  Nov 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Control Transient Combustibles

The team identified a non-cited violation of Vogtle Unit 2 Operating License Condition 2.G, for the licensee's failure to properly implement fire protection program procedures for control of transient combustible materials. Transient combustible materials that were left unattended in Unit 2 Fire Zone 152 were not included in the permit for transient combustibles or the fire loading calculation to determine the impact on the cumulative fire load specified in the fire hazards analysis for Fire Zone 152. Once identified, the licensee removed the combustible materials and initiated a condition report to address this issue.

The finding is greater than minor because it is associated with the protection against external factors attribute, i.e., fire. The transient combustible materials presented a credible fire scenario involving equipment important to safety, which degraded the reactor safety Initiating Events cornerstone objective to limit the likelihood of those events that may upset plant stability and challenge critical safety functions during shutdown as well as power operations. Considering the nature of the unapproved transient combustible materials and the fixed contents of the room, the likelihood of fire ignition or severity of fire were not significantly increased by the transient combustibles being present. Therefore, the finding was determined to be low degradation against the combustible controls program. The finding was of very low safety significance based on the low degradation rating. This finding has a cross-cutting aspect in the Work Control component of the Human Performance area because the licensee failed to appropriately plan work activities by incorporating job site conditions which may impact plant structures, systems, and components (NRC Inspection Manual Chapter 0305, H.3(a)).

Inspection Report# : [2007007](#) (*pdf*)

Mitigating Systems

Significance:  Mar 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Violation of 10CFR50, Appendix B, Criterion XI for Failure To Establish Adequate Test Control Measures For TS SR 3.7.5.2

Green. The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion XI, Test Control, for failure to consider the effects of instrument uncertainty, water temperature, or system orifice resistance during auxiliary feedwater (AFW) pump technical specification required surveillance testing. This finding was entered into the licensee's corrective action program as condition reports CR 2007105436, CR 2007105713, CR 2007105870, and CR 2007105895. Planned corrective actions included revision of the AFW pump test procedures to correct the non-conservative acceptance criteria.

This finding is more than minor because it affects the Mitigating Systems Cornerstone objective of ensuring the availability, reliability, and operability of the AFW pumps to perform the intended safety function during a design basis event and the cornerstone attribute of Procedure Quality, i.e. maintenance and testing procedures. The inspectors assessed the finding using the SDP and determined that the finding was of very low safety significance (Green) because the deficiency did not result in any AFW pumps being inoperable based upon a recent review of AFW surveillance testing results. (Section 40A5)

Inspection Report# : [2008002](#) (*pdf*)

Significance:  Mar 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Capability of Auxiliary Feedwater System to Meet Design and Licensing Requirements

The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion III, Design Control, for failure to include the cumulative effects of the replacement of the 1A motor driven auxiliary feedwater (AFW) pump rotating element, accuracy of AFW system resistance values, safety relief valve setpoint tolerances, and turbine driven AFW pump speed settings on evaluation of the performance of the AFW system. This finding was entered into the licensee's corrective action program as condition report CR 2007105979. Planned corrective actions included revision of the AFW system flow calculations to incorporate the most limiting design inputs.

This finding is more than minor because it affects the Mitigating Systems Cornerstone objective of ensuring the availability, reliability, and operability of the AFW system to perform the intended safety function during a design basis event and the cornerstone attribute of Design Control, i.e. initial design. The inspectors assessed the finding using the SDP and determined that the finding was of very low safety significance (Green) because the deficiencies did not result in the AFW system being inoperable based upon additional analysis that showed that the AFW system had sufficient flow performance margin to accommodate pump performance and the increased system flow resistance when applying appropriate resistance values and steam generator backpressures.

Inspection Report# : [2008002](#) (*pdf*)

Significance:  Nov 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Safe Shutdown Procedure 18068-2 Not Consistent With Analysis

The team identified a non-cited violation of Technical Specification 5.4.1, Procedures, in that Unit 2 safe shutdown procedure 18038-2, was not consistent with the safe shutdown analysis for Fire Zone 105-2. Specifically, certain time critical operator manual actions stated in the analysis were not incorporated into Procedure 18038-2 such that there was assurance that the actions would be completed within the times assumed in the analysis. The licensee initiated a condition report to address the issues associated with Procedure 18038-2 that were identified by the team.

This finding is more than minor because it is associated with the reactor safety Mitigating Systems cornerstone attributes of protection against external events, i.e., fire, and procedure quality. The finding was determined to be of very low safety significance due to the likelihood that the actions could be performed in sufficient time and the low likelihood of fires which could cause the type of cable damage that would challenge the procedure weaknesses. This finding has a cross-cutting aspect in the Resources component of the Human Performance area because the procedure was not complete and up to date in accordance with the safe shutdown analysis (NRC Inspection Manual Chapter 0305, H.2(c)).

Inspection Report# : [2007007](#) (*pdf*)

Significance:  Nov 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Emergency Lighting Units Not Installed as Required by the Fire Protection Program

The team identified a non-cited violation of Vogtle Unit 2 Operating License Condition 2.G, in that the licensee failed to install emergency lighting units (ELUs) in accordance with the approved fire protection program. Specifically, there were no ELUs installed in some areas where operator manual actions were required by Procedure 18038-2 to support post-fire safe shutdown for a fire in the main control room. The licensee initiated condition reports to address the ELU issues associated with Procedure 18038-2.

The finding is greater than minor because it is associated with the reactor safety Mitigating Systems cornerstone attribute of protection against external factors (i.e., fire) and it affects the objective of ensuring reliability and capability of systems that respond to initiating events. Specifically, the finding adversely affected the ability to perform local operator actions required to achieve and maintain SSD conditions following a main control room fire. The team determined that this finding was of very low safety significance because the operators had a high likelihood of completing the tasks using flashlights or portable lanterns. Consideration was given to the fact that operators

normally carry flashlights and would have access to portable lanterns to provide the necessary lighting.
Inspection Report# : [2007007](#) (pdf)

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Identify Replacement Strainer Clearances Greater than Design Procurement Specifications

The inspectors identified a non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion VII, Control of Purchased Materials, Equipment, and Services, for failure to identify deviations from the procurement specifications regarding the maximum allowable clearances of the replacement Unit 2 containment emergency recirculation sump strainers.

The finding is more than minor because it affects the Design Control and Equipment Performance attributes of the Mitigating Systems cornerstone objective in that larger perforations could have prevented long-term core decay heat removal. The finding was determined to be of very low safety significance (Green) because the affected components were not placed in service prior to repair. The finding has a cross-cutting aspect in the area of Human Performance involving supervisory and management oversight of work activities, particularly receipt inspection of containment sump screen hardware. This violation has been entered into the licensee corrective action program as CR 2007103895.

Inspection Report# : [2007003](#) (pdf)

Significance:  Jun 04, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Safety-Related 480 VAC Molded Case Circuit Breakers On MCC 1ABF, 1BBF, 2ABF, and 2BBF Not Tested

The inspectors identified a violation of 10 CFR 50, Appendix B, Criterion XI, Test Control, for failure to implement a test program to assure that all installed safety related molded case circuit breakers (MCCBs) will perform satisfactorily in service. Under postulated electrical fault conditions, failure of one of these circuit breakers to operate properly would lead to either a loss of power to safety-related components or lead to a potential for compromising other equipment on a single fault that the MCCB was designed to isolate. The 1A, 1B, 2A, and 2B motor driven auxiliary feedwater pump (MDAFWP) recirculation valve motor operators and the MDAFWP room cooler fans for both trains at both units receive their power through MCCBs.

This finding is more than minor because it is associated with the Mitigating Systems Cornerstone attribute of Procedure Quality. It impacts the cornerstone objective of ensuring the availability, reliability, and operability of the MDAFW pumps to perform their intended safety function during a design basis event. The inspectors assessed the finding using the SDP and determined the finding was of very low safety significance (Green) because the inspectors found no documented history of in-service failures of MCCBs rendering safety-related equipment inoperative. This issue is documented in the corrective action program as condition report (CR) 2007105855.

Inspection Report# : [2007006](#) (pdf)

Significance:  Jun 04, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Maximum Differential Pressure for Containment Emergency Sump Isolation Valves Not Calculated

The inspectors identified a violation of 10 CFR 50, Appendix B, Criterion III, Design Control, for failure to evaluate the impact of an increase of the residual heat removal (RHR) system pressure during the RHR pump operation in a minimum flow alignment in determining the maximum dP across the containment emergency sump isolation valves 1/2-HV-8811A/B, which could have challenged the capability of these motor operated valves (MOVs) to open following a small break loss of coolant accident (SBLOCA). Maximum system pressure would occur following a SBLOCA.

This finding is more than minor because it is associated with the Mitigating Systems Cornerstone attribute of Design Control. It impacts the cornerstone objective of ensuring the availability, reliability, and operability of the containment emergency sump isolation valves to perform their safety function during a SBLOCA event. The calculation deficiencies represented reasonable doubt regarding the operability of MOVs 1/2-HV-8811A/B pending the outcome of additional calculations initiated after the inspectors questioned the condition. The lack of an accurately calculated maximum dP across these MOVs created the possibility for repairs or modifications to be performed while using an

incorrect dP value as a design input. The inspectors assessed the finding using the SDP and determined the finding was of very low safety significance (Green) because there was not a loss of safety system function based upon the inspector's verification of the SNC analysis that the containment emergency sump isolation valves 1/2-HV-8811A/B were currently operable. This issue is documented in the corrective action program as CR 2007100247 and CR 2007105848.

Inspection Report# : [2007006](#) (*pdf*)

Barrier Integrity

Emergency Preparedness

Significance: **W** Aug 31, 2006

Identified By: NRC

Item Type: VIO Violation

White Finding Involving Failure to Identify A Weakness During an Emergency Exercise Critique Associated with an RSPS.

The NRC identified a Violation for failure of the licensee's exercise critique process to properly identify a weakness associated with a risk-significant planning standard (RSPS) that was determined to be a Drill/Exercise Performance (DEP) Performance Indicator (PI) opportunity failure during a full-scale exercise. The AV is associated with emergency preparedness planning standards 10 CFR 50.47(b)(14) and 10 CFR 50.47(b)(4) and the requirements of Section IV.F.2.g of Appendix E to 10 CFR Part 50. This finding was not entered into the licensee's corrective action program.

The failure of the licensee's exercise critique process was a performance deficiency. This finding was greater than minor because it was associated with the Emergency Preparedness Cornerstone and affected the cornerstone objective to ensure that the licensee was capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. The finding was an identified weakness that demonstrated a level of performance that could preclude effective implementation of the Emergency Plan in an actual emergency. This finding was also determined to potentially have greater significance because the licensee's exercise critique process failed to properly identify a weakness associated with an RSPS that was determined to be a DEP PI opportunity failure during a full-scale exercise.

Inspection Report# : [2006011](#) (*pdf*)

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

Last modified : June 05, 2008