

Vogle 1

4Q/2008 Plant Inspection Findings

Initiating Events

Significance:  Sep 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Human Performance Error Results in Unplanned Reactivity Addition

Green. A self-revealing non-cited violation of TS 5.4, Procedures, was identified when the licensed control room operator failed to perform step 4.3.5.10.b of procedure 3010- 1, Boron Thermal Regeneration System, Rev 57. Failure to properly perform this step resulted in approximately 500 gallons of unborated water being added to the VCT causing an inadvertent positive reactivity addition to the Unit 1 reactor.

The failure to place handswitch 1-HS-7054 in the CLOSED position as required by procedure is a performance deficiency. The minor screening criteria in IMC 0612, Power Reactor Inspection Reports, Appendix B, was not used due to the lack of clear guidance regarding inadvertent reactivity additions. Therefore, in consultation with the NRR program office, regional management determined this finding is more than minor because the licensed operator failed to properly implement procedure 13010-C which resulted an inadvertent positive reactivity addition causing reactor power to briefly increase above 100%. The finding, assessed using the Significance Determination Process, was determined to be of very low safety significance (Green) because the resulting transient did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. The inspectors determined this finding was related to the Work Practices component of the Human Performance cross-cutting area in that the licensed operator did not have the procedure in-hand during use as required by procedure 00054-C, Rules for Performing Procedures, Rev. 19. [H.4(b)] (Section 40A3)

Inspection Report# : [2008004](#) (*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*)

Barrier Integrity

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedures Associated with Degraded Ability to Detect Boric Acid Leakage

A NRC-identified non-cited violation of 10 CFR 50, Appendix B, Criterion V, was identified for lack of procedures to address compensatory measures for containment conditions which would mask indications of boric acid leakage. A combination of condensation and leaking containment cooler coils produced a white, crystalline film in large portions of the lower levels of containment that would reduce the adequacy of visual inspections performed to detect boric acid leakage on susceptible components. The licensee entered the deficiency into their corrective action program for resolution.

This finding is more than minor because it affected the procedure quality attribute of the Barrier Integrity Cornerstone in that there were no additional measures taken to discriminate between boric acid leakage and the white residue present in containment which masked actual boric acid leakage. The finding is of very low safety significance because no degradation discovered called into question the operability of an affected component.

Inspection Report# : [2008003](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

G**Significance:** Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Unauthorized Entries Into High Radiation Areas

Two examples of a self-revealing non-cited violation of Technical Specification 5.7.1, High Radiation Area, [were] identified for unauthorized entry into High Radiation Areas (HRAs). Inadequate communication between workers and Health Physics department resulted in licensee personnel breaching HRA boundaries without prior knowledge of the radiological conditions. The licensee had entered these issues into the corrective action program as Condition Reports 2007105476 and 2007108830.

This finding is greater than minor because it is associated with the Occupational Radiation Safety Cornerstone attribute of Human Performance and adversely affects the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation from radioactive material during routine civilian nuclear reactor operation. The finding was evaluated using the Occupational Radiation Safety Significance Determination Process and was determined to be of very low safety significance because it not related to As Low As Reasonably Achievable (ALARA) planning, did not involve an overexposure or substantial potential for overexposure, and the ability to assess dose was not compromised. This finding involved the cross-cutting aspect of Human Performance, Work Practices [H.4.a] because the HRA events were a direct result of poor communications during pre-job briefings and a willingness on the part of licensee personnel to proceed in the face of uncertainty.

Inspection Report# : [2008005](#) (*pdf*)

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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