

Surry 2

3Q/2004 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: **W** Jun 30, 2004

Identified By: NRC

Item Type: VIO Violation

Alternative Shutdown Capability and Response Procedures Not Adequate to Ensure Safe Shutdown of Unit 1 and 2

A violation of 10 CFR 50, Appendix R, Sections III.L.2.b and III.L.3 was identified, in that, for a severe fire in the Emergency Switchgear and Relay Room Number 1 (Fire Area 3), the licensee's fire response procedures were not effective in assuring a safe shutdown of the Unit 1 reactor. The licensee has revised the affected fire response procedures and is evaluating the need for additional corrective action.

This finding is greater than minor because it was associated with "protection against one of the external factors" attribute. It affected the objective of the Initiating Events cornerstone to limit the likelihood events that challenge critical safety functions as well as affected the objective of the Mitigating Systems cornerstone to ensure the availability, reliability and capability of systems that respond to initiating events. This degraded condition increased plant risk because, if a severe fire occurred in Fire Area 3, these procedures may not preclude an extended loss of reactor coolant pump seal injection flow and may initiate a reactor coolant pump seal loss of coolant accident which could result in pressurizer level failing to be maintained within the indicating range as required.

This violation was dispositioned as a White finding by NRC Inspection Report 05000280/2004008 and 05000281/2004008, dated September 15, 2004.

Inspection Report# : [2004008\(pdf\)](#)

Significance: **G** Jan 07, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Alternate Shutdown Panel Ventilation System Not Independent From Impacts Of A Main Control Room Fire.

A Green non-cited violation was identified for failure to comply with 10 CFR 50, Appendix R, Sections III.G.3.a and III.L.3. Specifically, the shared ventilation system between the main control room (MCR) and the Unit 1 and Unit 2 emergency switchgear and relay rooms (ESGRs), did not have adequate separation, isolation, or barriers to preclude smoke and toxic gases from being transported to the ESGRs during a fire in the MCR. The alternative shutdown capability for an MCR fire is located in each unit's ESGR, respectively. Consequently, operators may not have the environmental conditions or visibility to safely man and accomplish a successful shutdown of either Unit 1 or Unit 2 from the Auxiliary Shutdown Panels. The licensee has entered this finding into its corrective action program.

This finding is greater than minor because it was associated with the "protection against external factors" attribute and affected the objective of the Mitigating Systems cornerstone to ensure the availability, reliability, and capability of systems that respond to initiating events. This finding was determined to be of very low safety significance because heat from a fire, and the natural buoyancy of smoke, will cause the smoke gas layer to accumulate near the ceiling of the MCR (away from the ESGRs), the likelihood of a severe fire in the MCR is low, and the prompt response and actions of the MCR operators and the fire brigade would prevent any fires that start from becoming severe.

Inspection Report# : [2003008\(pdf\)](#)

Barrier Integrity

Significance: **G** Dec 27, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Violation of 10 CFR 50.55a(b)(2)(ix) for Failure to Perform Examinations of the Unit 2 Containment Liner in Accordance with

Requirements of Subsection IWE of ASME Section XI.

The inspectors identified a non-cited violation of 10 CFR 50.55a.(b)(2)(ix), for failure to examine the metal liner of the Unit 2 concrete containment in accordance with Subsection IWE of Section XI of the 1992 Edition with the 1992 Addenda of the ASME Code

Failure to perform inspections of containment moisture barriers, failure to identify defective areas in the moisture barrier, and failure to correct the defects were of greater than minor significance because they could lead to more significant degradation of the containment. The licensee's inspection procedures were not adequate to identify the degraded moisture barrier and the condition may not have been identified because the licensee's inspection program was pre-conditioned based on the details shown on drawings and not actual observations. Degradation of the moisture barrier had the potential to permit moisture intrusion into inaccessible areas of the pressure retaining surfaces of the containment liner. The performance deficiency was of very low safety significance because sufficient corrosion of the containment vessel had not occurred to cause an open pathway in the physical integrity of the containment.

Inspection Report# : [2003005\(pdf\)](#)

Emergency Preparedness

Occupational Radiation Safety

Significance:  Sep 25, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to implement and maintain a respiratory protection program that includes written procedures regarding training of respirator users in the change out of SCBA air cylinders

The inspectors identified a violation of 10 CFR 20.1703(c)(4)(ii) which requires the licensee to implement and maintain a respiratory protection program that includes written procedures regarding training of respirator users. In addition, this was related to the emergency planning standards of 10 CFR 50.47(b) (10). Specifically, procedures were not in place to ensure that all Control Room staff had demonstrated proficiency in changing Self Contained Breathing Apparatus (SCBA) air cylinders during emergencies.

This finding is greater than minor because emergency workers who are required to use respiratory protective equipment are not trained to use that equipment. This finding is of very low safety significance because an adequate number of SCBA qualified plant personnel/staff, which were designated emergency responders, would have been available to respond in the event of an actual emergency.

Inspection Report# : [2004004\(pdf\)](#)

Public Radiation Safety

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

Significance: N/A Dec 05, 2003

Identified By: NRC

Item Type: FIN Finding

Biennial Problem Identification and Resolution Report

The team concluded that Surry personnel were properly identifying problems and entering them into the corrective action program at a threshold that supported safe plant operation. The team did not identify instances where conditions adverse to quality were handled outside the corrective action process. The team further concluded that evaluations were prioritized and completed in a timely fashion consistent with the safety significance of the issue. Cause evaluations generally were found to address technical issues to a depth necessary to identify likely causes. The team identified one finding regarding a less than adequate procedure change evaluation that impacted the reliability of the Unit 1

turbine driven auxiliary feedwater pump. The team found that corrective actions were adequately tracked and completed in a time frame commensurate with their safety significance.

Inspection Report# : [2003009\(pdf\)](#)

Last modified : December 29, 2004