

North Anna 1

4Q/2004 Plant Inspection Findings

Initiating Events

Significance:  Dec 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Fire Response Procedures Not Adequate to Maintain Reactor Coolant Level Within the Level Indication of the Pressurizer (Section 40A5)

In May 2003, the licensee failed to have procedures in effect which would maintain the reactor coolant level in the level indication of the pressurizer during some fires in the Unit 1 and Unit 2 emergency switchgear and relay rooms (ESGRs). A fire in these areas could result in loss of cooling to the reactor coolant pump (RCP) seals and subsequent seal failure loss of coolant accident. The licensee has established interim measures to address this finding while long term corrective actions are evaluated.

An inspector-identified non-cited violation of 10 CFR 50, Appendix R, Sections III.L.2 and .3 was identified. The finding is more than minor, in that, it affected the objective of the Mitigating Systems Cornerstone to ensure the availability, reliability and capability of systems that respond to initiating events. For a severe fire in the ESGRs, established fire protection procedures would not preclude a RCP seal failure and subsequent loss of the capability to maintain the reactor coolant system level within the pressurizer level indication. A Significance Determination Process Phase 3 analysis determined that the finding was of very low safety significance mainly due to recovery actions in procedures and the low likelihood of fire damage to control and power cables due to their routing. (Section 40A5)

Inspection Report# : [2004006\(pdf\)](#)

Mitigating Systems

Significance:  Sep 25, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Prevent the Improper Installation of Three Hydraulic Snubber Supports.

An NRC-Identified Non-Cited Violation was identified for failure to take appropriate corrective actions to preclude the recurrence of a significant condition adverse to quality as required by 10 CFR 50 Appendix B Criterion XVI. Corrective actions taken in 2003 for an improperly installed snubber failed to include actions to inspect for additional snubbers which were installed with an incorrect offset. As a result three additional snubbers were identified in 2004 which were installed with incorrect offsets. The licensee also had a potential opportunity to identify this condition during the Spring 2003 refueling outage visual inspections of these snubbers.

This finding is more than minor because it adversely impacted the reactor safety mitigating system cornerstone objective, in that, protection against external factors such as seismic events are needed to ensure the availability, reliability and capability of the reactor coolant system. The finding was determined to have very low safety significance because the snubbers remained operable. This finding involved the cross-cutting aspect of Problem Identification and Resolution.

Inspection Report# : [2004005\(pdf\)](#)

Significance:  Jun 26, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Properly Inspect the EDG Tornado Exhaust Missile Barriers

The licensee failed to adequately implement the preventative maintenance program to properly inspect the Emergency Diesel Generator concrete tornado missile barriers.

An inspector-identified non-cited violation of Technical Specification 5.4.1.a was identified. The finding is more than minor because if the condition was left uncorrected it would become a more significant safety concern. Continued degradation of the concrete would lead to spalling and concrete debris in the exhaust piping. Accumulation of debris would restrict exhaust flow and derate the engine Kilowatt output. The finding was determined to be of very low safety significance because the tornado concrete structure remained intact and capable to perform the design basis function to protect the exhaust piping.

Inspection Report# : [2004003\(pdf\)](#)

G**Significance:** Jun 26, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Alternate Shutdown Panel Ventilation System Not Independent From Impacts of a Main Control Room Fire

The licensee failed to provide adequate separation, isolation, or barriers for the shared ventilation system between the main control room (MCR) and the Units 1 and 2 emergency switchgear rooms (ESGRs).

A non-cited violation for failure to comply with 10 CFR 50, Appendix R, Sections III.G and III.L was identified by the inspectors. In some fire scenarios involving a severe fire in the MCR, smoke and toxic gases could be transported to the ESGRs where the alternate shutdown panels (ASPs) are located. The licensee entered this finding into their corrective action program as Plant Issue N-2003-1585. This finding is greater than minor because it affected the Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. Because the alternative shutdown capability is not physically independent of the affected fire area, it could present a habitability concern for the operators attempting to achieve shutdown at the respective unit's ASP. This finding is of very low safety significance because both the likelihood of starting a MCR fire and likelihood of generating sufficient smoke to spread to the ESGRs are very low. Additionally, timely fire brigade response activities would provide a pathway to ventilate the smoke away from the MCR.

Inspection Report# : [2004003\(pdf\)](#)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

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

Miscellaneous

Last modified : March 09, 2005