

Harris 1

2Q/2004 Plant Inspection Findings

Initiating Events

Significance: N/A Sep 19, 2003

Identified By: NRC

Item Type: FIN Finding

95001 SUPPLEMENTAL INSPECTION FOR WHITE PERFORMANCE INDICATOR (UNPLANNED SCRAMS)

This supplemental inspection was conducted to assess the licensee's evaluation associated with a White performance indicator in the initiating events cornerstone. The White performance indicator involved crossing the threshold from Green to White for the Unplanned Scrams per 7,000 Critical Hours Performance Indicator in the second quarter of calendar year 2003. Specifically, the licensee experienced three reactor trips during the first two quarters of 2003 and also one reactor trip in the third quarter of 2003. The first reactor trip, which occurred on May 18, 2003, was an automatic trip from approximately 27 percent reactor power most likely caused by an equipment failure associated with the main turbine generator electrical overspeed protection circuit. The second reactor trip, which occurred on May 20, 2003, was a manual trip from approximately 20 percent reactor power caused by an equipment failure associated with a condensate booster pump. The third reactor trip, which occurred on June 14, 2003, was a manual trip from approximately 100 percent reactor power caused by an equipment failure associated with a main feedwater pump. The fourth reactor trip, which occurred on August 17, 2003, was a manual reactor trip from approximately 100 percent reactor power caused by an equipment failure of a condensate pump.

The licensee's problem identification, root cause and extent-of-condition evaluations, and corrective actions for the four reactor trips were adequate.

Common cause aspects linking the four reactor trips from a risk perspective were not evident.

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

Mitigating Systems

Significance:  Dec 27, 2003

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

LOSS OF DECAY HEAT REMOVAL DUE TO LOSS OF COMPONENT COOLING WATER

Green. The inspectors identified a non-cited violation of 10 CFR 50 Appendix B, Criterion XVI, Corrective Action, for a failure to prevent repetition of a loss of Component Cooling Water (CCW) which resulted in a five minute loss of decay heat removal while in shutdown cooling. This finding is greater than minor because it affected both the initiating events and mitigating systems cornerstones due to a system alignment that caused lifting of a CCW relief valve (1CC-294) and improper relief valve nozzle ring settings which caused the relief valve to remain open affecting CCW reliability and affecting at least one train of decay heat removal while shutdown. This finding is of very low safety significance because of the availability of a spare CCW pump, a spare charging/safety injection pump, the large capacity of the refueling water storage tank, and the operator's ability to restore CCW in a timely manner.

Inspection Report# : [2003010\(pdf\)](#)

Significance:  Oct 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE IMPLEMENTATION OF THE FIRE PROTECTION PROGRAM FOR SAFE SHUTDOWN

Green. The inspectors identified a non-cited violation (NCV) of Operating License Condition 2.F, the Fire Protection Program, and Technical Specification 6.8.1, Procedures and Programs, for inadequate implementation of the fire protection program. Physical and procedural protection for equipment that was relied on for safe shutdown (SSD) during a fire in fire safe shutdown analysis (SSA) areas 1-A-BAL-B-B1, 1-A-BAL-B-B2, 1-A-BAL-B-B4, 1-A-BAL-B-B5, 1-A-EPA, and 1-A-BAL-C of the reactor auxiliary building was inadequate. Consequently, a fire in one of these SSA areas could result in a reactor coolant pump seal loss of coolant accident event, a main steam power-operated relief valve failed open event, a loss of high pressure safety injection, and/or a loss of component cooling water to the reactor coolant pump seals. Licensee corrective action included assigning an additional operator to be available to perform post-fire SSD actions and performing a complete review of the SSA and related operating procedures. This finding was greater than minor because it involved a lack of required fire barriers for equipment that was relied upon for safe hot shutdown following a fire. The finding also had more than minor safety significance because it affected the objectives of the Mitigating Systems and Initiating Events Cornerstones. The finding affected the availability and reliability of systems that mitigate initiating events to prevent undesirable consequences and also affected the likelihood of occurrence of initiating events that challenge critical safety functions. The finding was of very low significance (Green) because of the low fire ignition frequencies, lack of combustible materials in critical locations, and the effectiveness of the fire protection features and the unaffected SSD equipment to mitigate a fire in each of the affected fire zones/areas.

Inspection Report# : [2003007\(pdf\)](#)

G**Significance:** Oct 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE CORRECTIVE ACTION FOR A PREVIOUS WHITE FIRE PROTECTION FINDING

Green. The inspectors identified a non-cited violation (NCV) of Operating License Condition 2.F, the Fire Protection Program, and Technical Specification 6.8.1, Procedures and Programs, for inadequate corrective action for previous Violation 50-400/02-08-01. Corrective action for that violation had included creating a new auxiliary control panel fire area (1-A-ACP) in 2002. However, that corrective action was not adequate because physical and procedural protection for equipment that was relied on for safe shutdown (SSD) during a fire in the new fire area was inadequate. Consequently, a fire in area 1-A-ACP could result in a loss of auxiliary feedwater and a main steam power-operated relief valve failed open event. Licensee corrective actions in response to this finding included assigning an additional operator to be available to perform post-fire SSD actions and performing a complete review of the SSA and related operating procedures. This finding was greater than minor because it involved inadequate fire barriers for equipment that was relied upon for safe hot shutdown following a fire. The finding also had more than minor safety significance because it affected the objectives of the Mitigating Systems and Initiating Events Cornerstones. The finding affected the availability and reliability of systems that mitigate initiating events to prevent undesirable consequences and also affected the likelihood of occurrence of initiating events that challenge critical safety functions. The finding was of very low significance (Green) because of the very low ignition sources in the fire area, manual suppression capability, and the power conversion system not being affected by a fire in this fire area.

Inspection Report# : [2003007\(pdf\)](#)

Barrier Integrity

G**Significance:** Jun 26, 2004

Identified By: NRC

Item Type: FIN Finding

Self-Revealing Steam Generator Tube Leak

Green. A finding of very low safety significance was identified through a self-revealing, steam generator tube leak event. Licensee inspectors missed three opportunities during previous inspection activities involving the C steam generator, to identify a loose part which ultimately resulted in a steam generator tube leak. This finding was more than minor because it involved the human performance attribute that affected the reactor coolant system portion of the barrier integrity cornerstone objective. The finding was of very low safety significance because (1) the operational leakage rate was below both the Technical Specification criteria and the calculated "accident leakage" rate; (2) the tubes in question were found to meet required performance criterion for pressure, as demonstrated by in-situ testing; and (3) re-review of the eddy current data for the entire population of tube segments which did not receive a secondary analysis in 2003 did not find any additional indications missed by primary analysts. This finding was related to the cross-cutting area of human performance because during previous steam generator inspection activities, three separate human performance errors contributed to overlooking the foreign object in this steam generator.

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

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

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

Miscellaneous

Significance: N/A Jul 25, 2003

Identified By: NRC

Item Type: FIN Finding

PROBLEM IDENTIFICATION & RESOLUTION

The licensee was effective at identifying problems at a low threshold and entering them into the corrective action program. The licensee properly prioritized issues and routinely performed adequate evaluations that were technically accurate and of sufficient depth. Formal root cause evaluations for significant conditions adverse to quality were especially thorough and detailed. Corrective actions developed and implemented for problems were timely and effective, commensurate with the safety-significance of the issue. The licensee's self-assessments and audits were effective in identifying deficiencies in the corrective action program. Based on discussions conducted with plant employees from various departments the inspectors did not identify any reluctance to report safety concerns. However, several minor problems were identified related to thoroughness and effectiveness of corrective action, and equipment deficiencies not properly entered into the corrective action program.

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

Last modified : September 08, 2004