Harris 1
1Q/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)*

Significance:  Jun 28, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to establish adequate general operating procedures for reactor trip recovery and hot standby to minimum load (nuclear startup)
Green. A non-cited violation of Technical Specification 6.8.1 was identified for a failure to establish adequate general operating procedures for reactor trip recovery and hot standby to minimum load (nuclear startup). The general operating procedures did not ensure that the main feedwater regulating valves were shut or isolated prior to operators shutting the reactor trip breakers. Not isolating the main feedwater regulating valves during recovery from a reactor trip resulted in two main feedwater regulating valves opening when the reactor trip breakers were shut. Being in this condition caused a high level in two steam generators and protective signals to trip the main feedwater pumps, isolate the feedwater lines, and start the motor-driven auxiliary feedwater pumps.

The self-revealing issue was greater than minor because it involved a procedural inadequacy that resulted in automatic actuations of equipment related to the mitigating system cornerstone. The issue had very low safety significance because the unit was shutdown and no safety limits were affected.
Inspection Report# : 2003003*(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: G 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)*

Significance: G 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)*

Significance: N/A May 09, 2003
Identified By: NRC
Item Type: FIN Finding
SPECIAL INSPECTION OF LOSS OF SHUTDOWN COOLING DUE TO LOSS OF CCW
Overall, the licensee conducted a comprehensive review of the loss of shutdown cooling event of April 28, 2003. Task Analysis, Event and Causal Factor Analysis, and Fault Tree Analysis techniques were utilized to determine contributing and root causes for the event. The event review team recognized the potential common cause vulnerability of incorrect relief valve nozzle ring settings and initiated an extent of condition evaluation to address the problem. Past operability reviews adequately addressed system operability considerations.

The special inspection team concluded that the root cause of the event was inadequate corrective action from previous similar events which allowed the conditions within the CCW system to repeat, causing the relief valve to lift. In addition, past corrective actions for incorrect relief valve nozzle ring setting problems were ineffective which caused the relief valve to remain open for an excessive period of time.

Inspection Report# : 2003008*(pdf)*

Significance: G Apr 05, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
INADEQUATE ROVING CONTINUOUS FIRE WATCHES
Green. A failure to complete a written evaluation required by 10 CFR 50.59 involving two fire watch related procedures resulted in an inappropriate use of continuous fire watches to rove between fire areas. A non-cited violation of 10 CFR 50.59 (d)(1) was identified. This finding is greater than minor because there was a reasonable likelihood that the subject changes would have required Commission review and

approval prior to implementation. However, the finding is of very low safety significance because the consequences of the change would not have adversely affected the licensee's ability to achieve and maintain safe shutdown of the plant.
Inspection Report# : 2003002*(pdf)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Significance: G Apr 11, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to remove a worker, whose fitness may have been questionable, from activities within the scope of 10 CFR Part 26.
Green. An inspector identified a non-cited violation of 10 CFR 26.27(4)(b)(1). The finding is greater than minor, because if left uncorrected, the issue could have become a more significant safety concern in that the trustworthiness and reliability of employees is an critical attribute of the Physical Protection Cornerstone objective. It was determined to be of very low safety significance because it involved a failure to meet regulatory requirements involving the access control/behavioral observation program; however, there was no malevolent action and there have not been greater than two similar findings in the previous four quarters.
Inspection Report# : 2003006*(pdf)*

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 : May 05, 2004