Waterford 3
4Q/2006 Plant Inspection Findings

Initiating Events

Significance: G Oct 07, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Maintenance Procedure for ESFAS Relay Replacement
A self-revealing noncited violation of Technical Specification 6.8.1.a was identified for an inadequate procedure that resulted in the unintentional actuation of five engineered safety features actuation system Train B relays and the loss of a 480 Vac motor control center. The 480 Vac motor control center provided power to the Train B pressurizer heaters and to the control element assembly motor generator Set B. Loss of the control element assembly motor generator increased the likelihood of a reactor trip. This finding is greater than minor because it affects the Initiating Event cornerstone objective procedure quality attribute to limit the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. This finding was evaluated using the significance determination process and was determined to be of very low safety significance (Green) because the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. This finding had a crosscutting aspect in the area of human performance associated with resources because the licensee failed to ensure that Work Order 26998 was adequate for the task.

Inspection Report# : 2006004 *(pdf)*

Mitigating Systems

Significance: G Oct 07, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Inspection of Essential Chiller Condenser Tubing
A self-revealing noncited violation of Technical Specification 6.8.1.a was identified for failing to follow a maintenance procedure during performance of eddy current testing on the safety-related essential chiller Train A condenser tubing. The performance deficiency was the failure to perform a full length eddy current inspection of each tube with an appropriately sized eddy current probe. Subsequently, essential chiller Train A was removed from service to correct a throughwall tube leak in its condenser. This finding is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone because the performance deficiency affected the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. Using IMC 0609, “Significance Determination Process,” Appendix A, Phase 1, questions for mitigating systems, the inspectors determined that this finding was of very low safety significance (Green) because the finding was not a design or qualification deficiency, there was no loss of a safety function, and there were no other adverse impacts to the facility. This finding had a crosscutting aspect in the area of human performance associated with work practices because the licensee failed to effectively communicate expectations of procedure compliance.

Inspection Report# : 2006004 *(pdf)*

Significance: SL-IV Aug 09, 2006
Identified By: NRC
Item Type: VIO Violation
Inaccurate Performance Indicator Information
The inspector identified a violation of 10 CFR 50.9, with two examples, for the failure to provide accurate information to

the NRC associated with the Safety System Unavailably High Pressure Injection and Residual Heat Removal Performance Indicators. The performance indicator information was inaccurate because the licensee improperly concluded that the Train B high pressure safety injection and Train B containment spray systems were still available during an extended period when the containment safety injection sump suction valve was partially open. The inspector found that the licensee had underestimated the size of valve (SI 602B) opening when assessing system availability and failed to address inconsistencies between their field data, diagnostic test data and their own informal calculations. Further, a second analysis performed by a contractor (to determine the as-found valve position) was inadequate, as it contained several errors and inappropriate assumptions. The licensee also provided inadequate contractor oversight with respect to this effort. The erroneous valve position determination resulted in the licensee reporting system availability information that caused the performance indicators to be Green when the High Pressure Safety Injection System Unavailability Performance Indicator should have been Red and the Residual Heat Removal System Unavailability Performance Indicator should have been Yellow. The failure to provide accurate information to the NRC in accordance with 10 CFR 50.9 requirements was a performance deficiency. The issue had more than minor significance in that, had the information been accurate, two performance indicators would have changed color. Per the NRC Enforcement Policy, Section IV.A.3, these issues are not subject to the Significance Determination Process. The Enforcement Policy, Supplement VII, specifies that a Severity Level III violation would be appropriate for these issues. However, considering: 1) the NRC's recently implemented Mitigating Systems Performance Index program, which would have resulted in the subject performance indicators returning to the Green threshold; and 2) the risk associated with the underlying valve performance issue was of very low safety significance (Green), the NRC determined that a Severity Level IV violation was more appropriate. This finding had problem identification and resolution crosscutting aspects, in that the implementation of the licensee's Corrective Action Program did not result in a thorough evaluation of the identified condition such that information reported to the NRC was verified to be complete and accurate.

Inspection Report# : 2006009 *(pdf)*

Significance: G Jul 07, 2006
Identified By: NRC
Item Type: VIO Violation
Untimely Actions to Reestablish Full Qualification of the Emergency Diesel Generator Starting Air System
The inspectors identified a Green violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control." In September 2003, the NRC identified that the emergency diesel generator starting air system was incapable of supplying sufficient air to start its respective emergency diesel generator a minimum of five times without being recharged. To date, the licensee has failed to take appropriate corrective actions in a timely manner to correct this deficiency and restore compliance.

This finding is greater than minor because it affected the mitigating system cornerstone objective due to the degradation of the design-basis capability of the starting air system. This finding has a crosscutting aspect in the corrective action component of the problem identification and resolution area because the licensee failed to take actions to address safety issues in a timely manner, commensurate with its safety significance and complexity. The finding was determined to be of very low safety significance because the deficiency did not represent an actual loss of the starting air system safety function per Generic Letter 91-18 guidance. Additionally, surveillance testing has demonstrated the capability of each diesel generator to start within the required 10 seconds.
Inspection Report# : 2006003 *(pdf)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

Significance: N/A Mar 24, 2006
Identified By: NRC
Item Type: FIN Finding
identification and Resolution of Problems
The team reviewed approximately 237 corrective action program documents, apparent and root cause analyses, as well as supporting documents to assess problem identification and resolution activities. Based on this review, the team found the licensee's process to identify, prioritize, evaluate, and correct problems was generally effective; thresholds for identifying issues remained appropriately low and, in most cases, corrective actions were adequate to address conditions adverse to quality. However, a number of issues were identified associated with the proper identification of degraded conditions in the plant. The team reviewed corrective actions associated with these degraded conditions and design issues at Waterford Steam Electric Station, Unit 3, which had cross-cutting aspects in the area of problem identification and resolution. The team concluded that a positive safety-conscience work environment exists at Waterford Steam Electric Station, Unit 3 based upon interviews conducted with plant personnel. The team determined that employees and contractors feel free to raise safety concerns to their supervision or bring concerns to the employees concern program.
Inspection Report# : 2006008 *(pdf)*

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