Pilgrim 1
1Q/2007 Plant Inspection Findings

Initiating Events

Significance: G Apr 02, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to evaluate failed AOG bypass valve contributes to manual reactor scram
The inspectors identified a non-cited violation (NCV) of Technical Specifications for failure to evaluate the impact of an inoperable manual bypass valve (1-HO-154) in the augmented off-gas (AOG) system. Specifically, on January 12 and March 12, 2006, when the bypass valve could not be opened, plant personnel did not initiate a condition report, evaluate the impact on plant operations, and consider the need to establish compensatory measures, contrary to corrective action process procedure requirements. As a result, opportunities to repair the valve were missed and the valve's inoperable condition was not communicated effectively to station management and within operations. Consequently, on March 13 the operating crew was unaware the bypass valve was inoperable and attempted to use the bypass valve to restore dilution steam flow to the recombiner when the controller failed. The inability to restore dilution steam flow led to an increase in recombiner temperature which required the operating crew to initiate a manual recator scram in accordance with procedure 2.4.141, "Abnormal Recombiner Operatin." Corrective actions, immediate and long-term, are provided for in the root cause evaluation for condition report (CR) 20060977 and CR 20061024.

The finding was determined to be of very low safety significance (Green), when evaluated per the significance determination process of MC-0609, Appendix A. The finding is more than minor because it led to a plant transient. The finding's significance however, was not greater than Green becuase it did not contribute to both a reactor trip and the likelihood that mitigation equipment or functions would not be available. This finding has a cross cutting aspect in problem identification and resolution which significantly contributed to the performance deficiency because Entergy did not thoroughly evaluate the degraded condition of the manual bypass valve for impact on the plant or appropriate compensatory measures. (Section 1R14)
Inspection Report# : 2006002 *(pdf)*

Mitigating Systems

Significance: G Jan 25, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to thoroughly evaluate degraded condition on "B" EDG following January overhaul
A Green self-revealing NCV of 10 CFR 50, Appendix B, Criterion XVI, “Corrective Action,” was identified for Entergy’s failure to promptly correct a condition adverse to quality associated with the “B” emergency diesel generator (EDG). During the post overhaul surveillance of the “B” EDG on January 25, 2007, the “B” EDG experienced unexpected load oscillations of approximately 150 kilowatt (kW). Subsequently, on February 23, 2007, oscillations of greater than 200 kW were seen, which resulted in the shutdown of the “B” EDG and an entry into a 72 hour Technical Specification (TS) Limiting Condition for Operation (LCO). Entergy corrected the kW load oscillations by replacing the mechanical portion of the “B” EDG governor. The “B” EDG was declared operable following successful testing. The issue was entered into Entergy’s corrective action program.

The inspector determined that this finding was more than minor because it was associated with the Equipment Performance attribute of the Mitigating Systems cornerstone; and, it affected the cornerstone objective of ensuring the reliability, availability, and capability of systems that respond to initiating events to prevent undesirable consequences. A Phase 3 SDP evaluation was necessary due to a potential for a greater than green finding as indicated in the site specific pre-solved Phase 2 worksheets. The Phase 3 evaluation concluded that the finding was of very low safety significance (Green). The inspector

also determined that this finding had a cross-cutting aspect in the area of Problem Identification and Resolution in that Entergy personnel failed to thoroughly evaluate the unexpected kW oscillations. (Section 1R19)

Inspection Report# : 2007002 *(pdf)*

Significance: G Dec 31, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
SL IV NCV for Inadequate 50.59 Evaluation for RFO 15 Emergency Diesel LOCA/LOOP Test Change
Green. The inspector identified a non-cited violation (NCV) for Entergy's failure to perform an adequate safety evaluation per 10 CFR 50.59. Specifically, a screening safety evaluation (SE) for surveillance 8.M.3-1, Special Test for Automatic ECCS [Emergency Core Cooling Systems] Load Sequencing of Diesels and Shutdown Transformer with Simulated Loss of Offsite Power and Special Shutdown Transformer Load Test, dated March 10, 2005, failed to provide an adequate basis to demonstrate that the surveillance procedure could be modified without obtaining a Technical Specification (TS) amendment from the NRC for TS 4.9.A.1. As a result, Entergy failed to conduct a complete surveillance test, as required by TS 4.9.A.1, to demonstrate functionality of the 'B' train systems. Entergy entered this issue into the corrective action program as condition reports (CRs) 200503343 and 200604598, invoked the provisions of TS 4.0.3 for an incomplete surveillance, and completed a risk evaluation for a surveillance delayed greater than 24 hours.

Because the issue affected the NRC's ability to perform its regulatory function, this finding was evaluated using the traditional enforcement process. The finding was determined to be more than minor because the change in test method required NRC review and approval prior to implementation. The finding was classified as Severity Level IV because it involved conditions evaluated as having very low safety significance by the Significance Determination Process (SDP). Specifically, the failure to conduct a complete surveillance test in accordance with TS 4.9.A.1did not result in the loss of operability of a safety system. The finding had a cross-cutting aspect related to the Decision-Making component of the Human Performance area in that Entergy did not use conservative assumptions in their 50.59 decision making process and failed to fully evaluate the licensing basis in their 50.59 safety evaluation. (Section 1R02
Inspection Report# : 2006005 *(pdf)*

Significance: SL-IV Jul 01, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
The inspector identified a Severity Level IV Non-Cited Violation associated with the failure to perform an adequate safety evaluation as required by 10 CR 50.59.
The inspectors identified a Severity Level IV Non-Cited Violation associated with the failure to perform an adequate safety evaluation per 10 CR 50.59. Contrary to 10 CFR 50.59, a screening safety evaluation for handling of a 35 ton cask in the spent fuel did not provide an adequate basis to demonstrate that the evaluation for use of a heavier cask did not change the evaluation methods approved by the NRC staff in 1985 for the control of heavy loads per NUREG 0612 commitments, as described in the UFSAR and the Pilgrim licensing basis. The finding was determined to be more than minor because the inspectors could not reasonably determine that the proposed cask handling activity would not have required NRC approval without subsequent significant enhancements to the 50.59 safety evaluation. The conditions associated with the finding (i.e., the potential drop of a loaded cask) were determined to be of very low safety significance because they did not result in the loss of operability of a safety system. Because the issue affected the NRC's ability to perform its regulatory function, this finding was dispositioned using the traditional enforcement process and was classified at Severity level IV because the violation of 10 CFR 50.59 involved conditions evaluated as having very low safety significance by the SDP. This finding has a cross cutting aspect of human performance, because Entergy did not fully review the licensing basis to develop the screening safety evaluation for ER05120679 dated 3/24/06, and thereby assure a design document was complete and accurate.
Inspection Report# : 2006003 *(pdf)*

Significance: G May 19, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
The team identified a Green non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, Design Control.
Entergy used a non-conservative calculation method to determine the critical condensate storage tank (CST) water level which would preclude vortex formation at the suction of the high pressure coolant injection (HPCI) pump. The finding was

more than minor because the formation of vortexing at the intake of the HPCI suction line could result in air entrainment, which in turn, could cause pulsating pump flow and/or reduction in pump performance. It was associated with the Mitigating Systems cornerstone attribute of design control and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. The team reviewed this finding using the Phase 1 SDP worksheet for Mitigating Systems and determined the finding was of very low safety significance (Green), because it did not represent a loss of safety function. (Section 1R21.2.1.1)
Inspection Report# : 2006006 *(pdf)*

Significance: G May 19, 2006
Identified By: NRC
Item Type: FIN Finding
The team identified a finding regarding Entergy's operability determination for a HPCI trip solenoid valve failure. The team identified a finding regarding Entergy's operability determination for a HPCI trip solenoid valve failure. Specifically, Entergy's operability evaluation technical basis did not support the specific technical specification (TS) requirement of ensuring that the HPCI system automatically isolates on a reactor vessel high water level signal. The finding was more than minor because it was associated with the Mitigating Systems cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. Specifically, Entergy did not ensure HPCI's continued reliability and capability to isolate automatically as designed during reactor vessel high water level conditions. The team reviewed this finding using the Phase 1 SDP worksheet and determined the finding was of very low safety significance (Green), because it did not represent a loss of safety function for greater than its TS allowed outage time. (Section 1R21.2.1.2)

Inspection Report# : 2006006 *(pdf)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

Last modified : June 01, 2007