FitzPatrick
1Q/2008 Plant Inspection Findings

Initiating Events

Significance: G Dec 31, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Implement Procedure Associated with Lake Condition Monitoring
A self-revealing NCV of Technical Specification 5.4, “Procedures,” was identified when operators did not implement certain steps specified in Operations Shift Standing Order 2007-020, “Lake Condition Monitoring,” Revision 4, which increased the likelihood of a scram. Entergy entered the condition into their corrective action program, revised the lake condition monitoring procedure, and discussed procedure adherence expectations with operators.

The inspectors determined that this finding is more than minor because it is associated with the Human Performance attribute (human error) of the Initiating Events cornerstone; and it impacted the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety function during shutdown as well as power operations. The inspectors evaluated this finding using Phase 1 of IMC 0609, Appendix A, “Significance Determination of Reactor Inspection Findings for At Power Situation,” and determined it 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 functions would not be available.

This finding had a cross-cutting aspect in the area of human performance because Entergy did not ensure that expectations regarding procedural compliance were met. (H.4(b)) (Section 4OA3)

Inspection Report# : 2007005 *(pdf)*

Significance: G Dec 31, 2007
Identified By: NRC
Item Type: FIN Finding
Feedwater Low Flow Control Valve Degradation Led to Primary Containment Isolation System Group Two Isolation
A self-revealing finding was identified involving inadequate corrective actions when Entergy failed to correct the adverse condition of the feedwater low-flow control valve, 34FCV-137. Entergy also failed to implement corrective actions in a timely manner to remotely monitor feedwater flow rate through the feedwater low-flow control valve in order to support level control. This condition resulted in a low level scram and primary containment isolation system group two isolation on September 12, 2007, and October 28, 2007. This problem was entered into Entergy’s corrective action program. Following the October 28, 2007, manual scram and subsequent low level scram, Entergy replaced the stem and packing box for the low-flow control valve and implemented an interim method to remotely monitor feedwater flow rate. In addition, Entergy has scheduled a design change to provide low-range feedwater flow rate instrumentation in the control room.

The inspectors determined that this finding is more than minor because it is associated with the equipment performance attribute of the Initiating Events cornerstone, and it impacted the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The inspectors evaluated this finding using Phase 1 of Inspection Manual Chapter 0609, Appendix A, “Significance Determination of Reactor Inspection Findings for At-Power Situations,” and determined it to be of very low safety significance (Green) because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available.

The inspectors determined that this finding had a cross-cutting aspect in the area of problem identification and resolution because Entergy did not take appropriate corrective actions, in a timely manner, to address the feedwater low-flow control valve degradation and to provide a method to monitor the feedwater control system response

following the low level scram and primary containment isolation system group two isolation on September 12, 2007. Consequently, another low level scram and primary containment isolation system group two isolation occurred on October 28, 2007. (P.1(d)) (Section 4OA3)

Inspection Report# : 2007005 *(pdf)*

Mitigating Systems

Significance: G Dec 31, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform a Risk Assessment When Required by 10 CFR Part 50.65(a)(4)
A self-revealing NCV of 10 CFR Part 50.65 (a)(4), "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," was identified when Entergy failed to perform a risk assessment prior to commencing performance of Instrument Surveillance Procedure ISP-175A1, "Reactor Containment Cooling Instrument Functional Test/ Calibration." This was due to instrument and control technicians performing the procedure which was not in accordance with the plant work schedule. This problem was entered into Entergy's corrective action program. Corrective actions included communicating the error to personnel, conducting human performance training, and improving administrative control of procedures.

The inspectors determined that the finding impacted the Mitigating Systems cornerstone because it impacted the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined that the finding is more than minor because the licensee's risk assessment failed to consider risk significant structures, systems, and components (i.e., high pressure coolant injection and reactor core isolation cooling) that were unavailable during the maintenance period.

Using IMC 0609, Appendix K, "Maintenance Risk Assessment and Risk Management SDP," Flowchart 1, "Assessment of Risk Deficit," the inspectors determined the incremental core damage probability deficit from Entergy's core damage frequency as a result of the actual duration of ISP-175A1 (1.07 hours). The inspectors calculated the incremental core damage probability deficit and determined it to be significantly lower than 1E-6. Because the calculated risk deficit was not greater than 1E-6 incremental core damage probability deficit, the inspectors determined that this finding was of very low safety significance (Green).

The inspectors determined that this finding had a cross-cutting aspect in the area of human performance because the instrument and control technicians involved did not effectively implement the expected human error prevention techniques (e.g., self-checking, prejob briefs, and proper documentation of activities), to ensure the correct procedure was used in accordance with the work schedule. (H.4(a)) (Section 1R13)

Inspection Report# : 2007005 *(pdf)*

Significance: G Sep 28, 2007
Identified By: NRC
Item Type: FIN Finding
Failure to correct negative slope of the reactor core isolation cooling system flow instrument sensing lines.
A self-revealing finding was identified involving inadequate corrective actions when Entergy did not correct an adverse condition on the reactor core isolation cooling (RCIC) system flow instrument sensing lines. The condition allowed air bubbles to form in the sensing lines, resulting in an erroneous flow indication. Consequently, the RCIC system would not have been able to achieve its design flow rate of 410 gallons per minute (gpm). Entergy entered the condition into their corrective action program and implemented interim corrective actions by revising the RCIC operating procedure to vent the sensing lines. In addition, Entergy has scheduled activities to correct the instrument sensing line condition.

The inspectors determined that this finding is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone; and, it impacted the cornerstone objective of ensuring

the availability, reliability, and capability of the RCIC system to respond to initiating events to prevent undesirable consequences. Specifically, the RCIC system would not have been able to achieve its design flow rate of 410 gpm. The inspectors evaluated this finding using Phase 1 of IMC 0609, Appendix A, ASignificance Determination of Reactor Inspection Findings for At-Power Situations,@ and determined it to be of very low safety significance (Green) because it was not associated with a design or qualification deficiency, it did not represent any actual loss of a system safety function, it did not represent the actual loss of a safety function of a single train for greater than its Technical Specification allowed outage time, and it was not potentially risk significant due to a seismic, flooding, or severe weather initiating event.

Inspection Report# : 2007004 *(pdf)*

Significance: G Jul 20, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to maintain adequate design basis calculations for safety-related motors.
The team identified a finding of very low safety significance involving a non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Control. The team determined that Entergy did not maintain appropriate design basis calculations to ensure that the safety-related motors for the emergency service water (ESW) and standby liquid control (SLC) pumps had adequate starting voltage.

The finding is more than minor because it is associated with the design control attribute of the Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of the ESW and SLC systems to respond to initiating events to prevent undesirable consequences. This finding is of very low significance because it did not result in the loss of operability.

This finding has a cross-cutting aspect in the area of human performance (Resources component) because Entergy did not ensure that adequate resources were available to maintain complete, accurate and up-to-date design documentation. (H.2(c))

Inspection Report# : 2007006 *(pdf)*

Significance: G Jul 20, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
EDG FOST capacity calculation did not account for vortexing.
The team identified a finding of very low safety significance involving a non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Control. The team determined that Entergy failed to properly identify and evaluate the potential for vortexing in the emergency diesel generator (EDG) fuel oil transfer pump (FOTP) suction inlet piping. Specifically, Entergy's EDG fuel oil storage tank (FOST) inventory calculation did not include any allowance for suction line submergence to prevent air entrainment resulting from the effects of vortexing.

The finding is more than minor because it is associated with the design control attribute of the Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of the EDGs to respond to initiating events to prevent undesirable consequences. This finding is of very low significance because it did not result in the loss of safety function.

This finding has a cross-cutting aspect in the area of problem identification and resolution (PI&R) (Self - and Independent Assessments component) because Entergy did not ensure that design basis self assessments were of sufficient depth, comprehensive, appropriately objective, and self-critical. (P.3(a))
Inspection Report# : 2007006 *(pdf)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the cover letters to security inspection reports may be viewed.

Miscellaneous

Last modified : June 05, 2008