Indian Point 3
4Q/2006 Plant Inspection Findings

Initiating Events

Significance: G Jun 30, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform an Adequate Risk Assessment when required by 10 CFR 50.65(a)(4) for the Nuclear Power Range Channel N42 Axial Offset Calibration.
The inspectors identified a non-cited violation of Title 10 of the Code of Federal Regulations (CFR), Part 50.65(a)(4) for failure to perform a risk assessment of emergent maintenance conducted on nuclear power range channel N42 on April 6, 2006. In response to this finding, Entergy performed a risk assessment and entered the deficiency into their corrective action program. Corrective actions completed included a review of the risk assessment process and promulgation of lessons learned by the work week manager. Ongoing corrective actions include a review of risk assessment practices by the Operations department and issuance of a new condition report to evaluate ongoing risk assessment deficiencies.

The inspectors determined that this finding is more than minor because it is similar to Example 7.e in Inspection Manual Chapter 0612, Appendix E, “Examples of Minor Issues,” in that, the licensee’s risk assessment failed to consider maintenance activities that could increase the likelihood of initiating events. The inspectors assessed the finding using Manual Chapter 0609, Appendix K, “Maintenance Risk Assessment and Risk Management Significance Determination Process,” Flowchart 1, “Assessment of Risk Deficit,” and determined the finding to be of very low safety significance because the incremental core damage probability deficit was less than 1 x 10-6. The inspectors also determined that the finding had a cross-cutting aspect in the area of human performance because, during work planning for emergent maintenance on nuclear power range channel N42, the licensee did not appropriately incorporate risk insights in accordance with 10 CFR Part 50.65(a)(4) and the Site Management Manual IP-SMM-WM-101, “Online Risk Assessment.”
Inspection Report# : 2006003 *(pdf)*

Mitigating Systems

Significance: G Dec 31, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO IMPLEMENT CORRECTIVE ACTIONS FOR DEGRADED NUCLEAR INSTRUMENTATION SYSTEM PERFORMANCE
The inspectors identified a Green non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, “Corrective Action,” because Entergy failed to take timely corrective actions for a condition adverse to quality associated with age-related degradation of the nuclear instrumentation system. Corrective action plans, which had been developed following repetitive equipment failures in 2003, had been deferred several times, resulting in the power range nuclear instrument 41 (N-41) over-temperature delta temperature reactor trip function being declared inoperable on March 20, 2006. Entergy entered this issue into the corrective action program and updated their corrective action plan to begin systematic replacement of the nuclear instrumentation system drawers in the upcoming refueling outage.

This finding is more than minor because it affected the Equipment Performance attribute of the Mitigating Systems cornerstone and impacted the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding was of very low safety significance since it did not represent a design or qualification deficiency, loss of safety function for the train or system, and was not risk-significant due to external event initiators.

This finding had a cross-cutting aspect in the area of Human Performance because Entergy did not provide the resources necessary to maintain long term plant safety by minimization of long-standing equipment issues, and by minimizing preventive maintenance deferrals, to address a condition adverse to quality in the nuclear instrumentation system.
Inspection Report# : 2006005 *(pdf)*

Significance: G Jan 18, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PERFORM AN ADEQUATE RISK ASSESSMENT WHEN REQUIRED BY 10 CFR 50.65(a) (4) FOR THE 33 EDG DURING EMERGENT CONDITIONS
The inspectors identified a Green non-cited violation of 10 CFR 50.65(a)(4), when Entergy failed to re-perform a risk assessment on the 33 emergency diesel generator during a High Wind Warning issued by the National Weather Service on January 18, 2006, which had the potential to cause offsite power instability. Entergy performed a risk assessment in response to this finding and entered the deficiency into the corrective action program. Entergy's corrective actions included conducting a review of the site risk assessment process and severe weather procedure. The inspectors determined that the finding had a human performance cross cutting aspect because the work week manager failed to perform a qualitative or quantitative risk assessment of external events for the maintenance and operations personnel failed to consider appropriate risk management actions described in the severe weather procedure.

The deficiency was greater than minor per appendix E of Manual Chapter 0612 example 7(e), because the deficiency is consistent with Manual Chapter 0612, appendix B, section 3, condition (5)(d). Specifically, the licensee risk assessment failed to consider unusual external conditions that were present or imminent (e.g., severe weather, offsite power instability). The 33 emergency diesel generator is risk significant for loss of offsite power considerations. Specifically, the licensee's risk assessment failed to consider external events' impact on risk significant systems, structures, and components, (included in Table 2 of the plant specific Phase 2 SDP, "Risk-Informed Inspection Notebook for Indian Point Nuclear Power Plant Unit 3 (Revision 2))" during the maintenance. The inspectors assessed the finding using Manual Chapter 0609, appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process," Flowchart 1, "Assessment of Risk Deficit," and determined the finding to be of very low safety significance because the incremental core damage probability deficit was less than 1 x 10-6.
Inspection Report# : 2006002 *(pdf)*

Significance: G Jan 10, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PERFORM AN ADEQUATE RISK ASSESSMENT WHEN REQUIRED BY 10 CFR 50.65(a)(4) FOR APPENDIX R EDG
The inspectors identified a Green non-cited violation of 10 CFR 50.65(a)(4), when Entergy failed to perform a risk assessment for the appendix 'R' emergency diesel generator when it was removed from service for planned maintenance on January 10, 2006. Entergy performed a risk assessment in response to this finding and entered the deficiency into their corrective action program. Corrective actions completed included a review of the risk assessment process and a management discussion of lessons learned with work week managers. Ongoing corrective action includes a review of risk assessment practices by the Operations Department. The inspectors determined that the finding had a human performance cross-cutting aspect because the work week manager did not perform a risk assessment for all risk significant systems removed from service in accordance with the Site Management Manual.

The deficiency was greater than minor per appendix E of Manual Chapter 0612 example 7(e), because the deficiency is consistent with Manual Chapter 0612, appendix B, section 3, condition (5)(a). Specifically, the licensee's risk assessment failed to consider risk significant systems, structures, and components, as well as support systems (included in Table 2 of the plant specific Phase 2 SDP, "Risk-Informed Inspection Notebook for Indian Point Nuclear Power Plant Unit 3 (Revision 2))" that were unavailable during the maintenance. The appendix 'R' emergency diesel generator is risk significant for power recovery following a loss of offsite power. The inspectors assessed the finding using Manual Chapter 0609, appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process," Flowchart 1, "Assessment of Risk Deficit," and determined the finding to be of very low safety significance because the incremental core damage probability deficit was less than 1 x 10-6.
Inspection Report# : 2006002 *(pdf)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

Significance: G Dec 05, 2006
Identified By: NRC
Item Type: FIN Finding
FAILURE TO ENTER SAFETY CULTURE ASSESSMENT RESULTS INTO CORRECTIVE ACTION PROGRAM
The NRC inspectors identified a finding when Entergy failed to initiate condition reports in accordance with EN-LI-102, "Corrective Action Process," for the adverse conditions identified in the 2006 Safety Culture Assessment. Consequently, the adverse conditions were not evaluated and appropriate corrective actions were not identified in a timely manner. The contractor who performed the independent safety culture assessment presented the site specific results to Entergy management in June 2006. The negative responses and declining trends identified in the assessment constituted adverse conditions that should have been entered into the corrective action program. At the time of the inspection, Entergy had not initiated condition reports for the assessment results. Consequently, the results had not been fully evaluated to understand the causes and identify appropriate actions to address the identified issues. Additionally, organizations identified by the contractor as needing management attention had not developed departmental action plans at the time of the inspection. Entergy entered this issue into the corrective action program and initiated a learning organization condition report to track development and implementation of action plans to address the assessment results.

The inspectors determined that the finding was more than minor because if left uncorrected it would become a more significant safety concern. Without appropriate action, the weaknesses in the safety culture onsite would continue, increasing the potential that safety issues would not receive the attention warranted by their significance. The finding was not suitable for SDP evaluation, but has been reviewed by NRC management and has been determined to be a finding of very low safety significance. The finding was not greater than very low safety significance because the inspectors did not identify any issues that were not raised which had an actual impact on plant safety or were of more than minor safety significance.

The inspectors determined that this finding had a cross-cutting aspect in the area of problem identification and resolution because Entergy did not identify issues with the potential to impact nuclear safety in the corrective action process for

evaluation and resolution in a timely manner.
Inspection Report# : 2006006 *(pdf)*

Significance: N/A Dec 05, 2006
Identified By: NRC
Item Type: FIN Finding
IDENTIFICATION AND RESOLUTION OF PROBLEMS
The inspectors concluded that the implementation of the corrective action program at Indian Point Unit 3 was generally effective. The inspectors noted that Entergy staff had a low threshold for identifying problems and entering them in the corrective action program. The inspectors also noted that once entered into the system, items were screened, prioritized, and evaluated commensurate with their significance using established criteria. The inspectors determined that corrective actions addressed the identified causes and were typically implemented in a timely manner. In addition, the team noted that Entergy was generally effective in reviewing and applying lessons learned from industry operating experience. The inspectors found that audits and assessments were critical and, in most cases, appropriate actions were taken to address identified issues. However, the inspectors also found that the results of an independent safety culture assessment were not entered into the corrective action program for timely evaluation and appropriate action.

The inspectors found that most workers indicated that they would raise issues that they recognized as nuclear safety issues. However, the inspectors also found that a number of workers interviewed indicated that they were aware of individuals they perceived as having been treated negatively by management for raising issues; most of these workers were in the Instrumentation and Controls (I&C) department. Some workers expressed reluctance to raise issues under certain circumstances due to a number of reasons, including fear of disciplinary action and concerns with the efficacy of the corrective action program. While most workers made a distinction between nuclear safety issues and other concerns, the inspectors noted that some of the illustrative examples provided by plant workers could have nuclear safety implications. However, the inspectors did not identify any more than minor issues, which had not been raised.
Inspection Report# : 2006006 *(pdf)*

Last modified : March 01, 2007