Turkey Point 4
1Q/2009 Plant Inspection Findings

Initiating Events

Significance: G Sep 30, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Failure To Implement Technical Specification Requirements Regarding Structural Integrity of Reactor Coolant System Components
The inspectors identified a Non-cited violation of Technical Specification (TS) 3.4.10, when the licensee failed to either isolate a flawed ASME Code Class 1 crack or place Unit 4 in a condition where the TS did not apply. As a result, plant operation was continued with a crack leaking boric acid on components, challenging the integrity of the reactor coolant system. When identified to the licensee, Unit 4 was shut down and cooled to a condition where the requirement did not apply and the crack was repaired. The licensee documented the failure to enter the TS as condition report (CR) 2008-27020.

The finding was more than minor because the un-isolated crack challenged the integrity of the reactor coolant system and affected the objective of the Reactor Safety/Initiating Events Cornerstone to limit the likelihood of those events that upset plant stability and challenge critical safety functions during at power operations. The finding was evaluated using inspection Manual Chapter 0609, “Significance Determination Process,” Phase 1 Worksheet for LOCA Initiators. Because of check valve protection downstream, and with the unimpeded ability to isolate charging upstream, the finding screened as having very low safety significance (Green). No cross-cutting aspect was associated with this finding.

Inspection Report# : 2008004 *(pdf)*

Significance: G Jun 30, 2008
Identified By: Self-Revealing
Item Type: FIN Finding
Maintenance causes smoke and fumes to enter the control room causing fire alarms.
A Self-Revealing finding of very low safety significance was identified after smoke and welding fumes from maintenance entered the control room through the ventilation system causing smoke alarms. When identified, the licensee stopped the maintenance and entered the issue into the corrective action program as CR 2008-17166.

The Initiating Events cornerstone was affected when smoke alarms occurred requiring the operators to initiate actions to protect themselves and the plant. The event screened as Green when mitigating systems remained unaffected and would have functioned, if needed. The cause of the finding is related to the cross-cutting area of Human Performance, Work Practices, (H.4.b) when personnel did not follow procedures in developing the work package for metalizing operations outside of the control room. (1R05)

Inspection Report# : 2008003 *(pdf)*

Mitigating Systems

Significance: G Nov 17, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Design Verification Affecting AFW Flow Control Valves and Unit 3 EDG Building Room Ventilation
The team identified a finding of very low safety significance involving two examples of a non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, Design Control. Specifically, in one example, the licensee failed to establish design control measures to verify or check the adequacy of critical design inputs for the calculation that determined that the Unit 3A and 3B emergency diesel generators (EDGs) would be operable at outside ambient temperatures at or below 75ºF if the 3A and 3B Diesel Building Ventilation Fans are out of service as allowed by procedures. In the second example, the licensee failed to ensure the adequacy of design for the auxiliary feed water steam generator flow control valves.

The finding was more than minor because it was associated with the Design Control attribute of the Mitigating System Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The team assessed the finding using the SDP and determined that the finding was of very low safety significance (Green) since it was a design deficiency determined not to have resulted in the loss of safety function. Specifically, in both cases, the licensee had not operated in a condition for which the design deficiencies in question were relied upon for operation. Both examples had been entered in the licensee's corrective action system. The finding was evaluated for cross-cutting aspects and none were identified. (Sections 1R21.2.3 and 1R21.2.4)

Inspection Report# : 2008006 *(pdf)*

Significance: G Nov 17, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Verify Limiting Value Adequacy for Safety-Related Battery Intercell Resistance
The team identified a NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," having very low safety significance involving the failure to verify and ensure that the 125 VDC safety-related batteries would remain operable if all the inter-cell and terminal connections were at the resistance value (< 150 micro-ohms) allowed by technical specification (TS) surveillance requirement (SR) 4.8.2.1.b(2)/c(3) and maintenance procedure 0-SME-003.3/.4/.15.

The finding was more than minor because if left uncorrected, the finding would become a more significant safety concern. Specifically, the 125 VDC safety-related batteries would become incapable of meeting their design basis function if the inter-cell and connection resistance were allowed to increase to the TS allowed value. The finding was of very low safety significance since it was a design deficiency determined not to have resulted in the loss of safety function. No cross cutting aspect was identified for this finding. The licensee entered this deficiency into their corrective action program. (Section 1R21.2.16)

Inspection Report# : 2008006 *(pdf)*

Significance: G Jun 30, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to implement procedures that assure component lineups prior to power escalation.
The inspectors identified a non-cited violation of Technical Specification (TS) 6.8.1, Procedures for failure to implement Unit 4 plant startup requirements regarding alignment of components that support operability of the recirculation sump. When identified, the licensee corrected the alignments and entered the issues into the corrective actions program as CR 2008-15444 and 2008-15505.

The Mitigating Systems cornerstone was affected when standby equipment was not in the specified ready lineup. The finding screened to be of very low safety significance when no loss of safety function occurred. The cross-cutting area of Human performance – Work Practices (H.4.c) was affected when the licensee did not assure supervisory oversight of work activities (valve lineup and debris gate position) to assure that nuclear safety was supported. (1R20)

Inspection Report# : 2008003 *(pdf)*

Significance: G Jun 30, 2008
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to take timely corrective actions leads to emergency diesel generator failure.
A Self-revealing Non-cited violation of 10 CFR 50, Appendix B, Criterion XVI was identified when external corrosion of a Unit 3 emergency diesel radiator was not promptly repaired resulting in a diesel failure. The licensee repaired the radiator and entered the event into their corrective action program as CR 2008-11134.

The finding affected the equipment performance attribute of the Mitigating System cornerstone due to the impact on availability and reliability of the EDG system. The finding screened to be of very low safety significance, Green, when the loss of safety function for the single train did not exceed the allowed outage time. The finding involved the cross-cutting area of Problem Identification, and Resolution, (P.1.c), when the licensee did not thoroughly evaluate the radiator corrosion such that the issue could be resolved prior to failure. (4OA2)

Inspection Report# : 2008003 *(pdf)*

Significance: G Sep 30, 2007
Identified By: NRC
Item Type: FIN Finding
Recurring Problems with Alternate Shutdown Communication Equipment
The inspectors identified a finding when the licensee did not identify and correct an adverse trend of recurring problems with the alternate shutdown communications system. When identified, the licensee entered the issue into the corrective actions program and initiated a review of reliability issues with the communications equipment.

The finding is more than minor because it affects the availability and reliability of the communications system used by plant operators to mitigate certain fire scenarios. The issue was of very low safety significance because an alternate communications system (radios) was available, if needed. The cause was related to the cross-cutting area of problem identification and resolution because the adverse trend of problems with alternate shutdown communications had not been identified nor corrected by the licensee commensurate with its safety significance. (IMC 305, P.1 (d)) (4OA2)
Inspection Report# : 2007004 *(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

Significance: SL-IV Dec 31, 2008
Identified By: NRC
Item Type: VIO Violation
Failure to Accomplish An Activity Affecting Quality in Accordance with Procedures

Inspection Report# : 2008005 *(pdf)*

Significance: N/A Jun 27, 2008
Identified By: NRC
Item Type: FIN Finding
Problem Identification and Resolution
The team concluded that in general, problems were properly identified, evaluated, prioritized, and corrected within the licensee's corrective action program (CAP). Evaluation of issues was generally comprehensive and technically adequate. Formal root cause evaluations for issues classified as significant adverse conditions were comprehensive and detailed. The team reviewed the licensee's corrective action program improvement plan and actions to address evaluation quality, timeliness, and overall CAP effectiveness. The team determined that progress has been made in improving all areas addressed by the improvement plan. Overall, corrective actions developed and implemented for issues were effective in correcting the problems. However, the team identified examples where corrective actions have not been entirely effective, or potential adverse trends had not been identified and entered into the CAP.

The team determined that thresholds for identifying issues were appropriately low. Nuclear Assessment Section audits and departmental self-assessments were effective in identifying issues and directing attention to areas that needed improvement. Licensee identified weaknesses and issues in self-assessments were appropriately entered into the CAP and addressed.

Based on discussions and interviews conducted with plant employees from various departments, the inspectors did not identify any reluctance to report safety concerns.

Inspection Report# : 2008008 *(pdf)*

Last modified : May 28, 2009