Nine Mile Point 1
2Q/2007 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Jun 29, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
Failure To Take Action Per Operating Experience Results In Two Inoperable IRM Channels During Reactor Startup
A self-revealing Green NCV of 10 CFR 50, Appendix B, Criterion XVI, “Corrective Actions,” occurred when NMPNS failed to identify and correct a condition adverse to quality, associated with two of the four Unit 1 intermediate range monitor (IRM) instrument channels, when they failed to perform vendor recommended testing during refueling outage (RFO) 19. As a result, operators identified two of the four IRM instrument channels, associated with the 12 reactor protection system (RPS) trip, inoperable during the startup on April 14, 2007. Operators immediately halted the startup and maintenance repaired the signal cable connections. NMPNS entered the issue into its corrective action program (CAP) as condition report (CR) 2007-2359.
The finding is greater than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone and adversely affects the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined that the finding to be of very low safety significance because the finding is not a design or qualification deficiency, does not represent a loss of a system safety function or safety function of a single train, and does not screen as potentially risk significant due to external events. This finding has a cross-cutting aspect in the area of human performance because NMPNS management failed to use conservative assumptions in decision making and inappropriately deleted vendor recommended testing designed to detect degraded IRM system cable connections (H.1.b).
Inspection Report# : 2007003 *(pdf)*

Significance: W Jan 18, 2007
Identified By: NRC
Item Type: AV Apparent Violation
Failure to Ensure Integrity of Unit 1 Examinations and Tests
White. An apparent violation of 10 CFR 55.49, “Integrity of Examinations and Tests,” was identified, concerning an apparent compromise of the 2005 and the 2006 annual operating exams at Unit 1. NRC inspectors identified practices that collectively had the impact of compromising, albeit unintentionally, the examinations; these practices included: 1) a lack of simulator exam scenario diversity (i.e., The scenarios were substantially the same including: critical tasks; major transients; Emergency Operating Procedure flow paths; and emergency classifications); 2) an overuse of a single emergency operating procedure strategy (i.e., full core Anticipated Transient Without Scram); and 3) a pattern of crews validating scenarios substantially similar to their exam scenario sets. Constellation had not identified and compensated for the compromise prior to completing the 2005 exam and returning the operators to normal control room duties. Following NRC identification of the compromise in 2006, Constellation took immediate and substantive corrective actions prior to completion of the annual operating exam cycle. Based on the Licensed Operator Requalification Significance Determination Process (SDP) this finding was preliminarily determined to be of low to moderate safety significance (White). The licensee initiated Condition Report CR-NM-2006-4808, dated October 19, 2006, that documented this issue and later initiated a Category I Root Cause Analysis (CR-NM-2006-4808), “Annual Licensed Operator Requalification Exam Compromise.”
This finding was more than minor because it was associated with the Human Performance attribute of the Initiating Events, Mitigation Systems, and Barrier Integrity cornerstones and affected the combined objective of: limiting the

likelihood of; ensuring the availability and reliability of mitigating systems to respond to; and providing reasonable assurance that physical barriers protect the public from radio-nuclide releases caused by, initiating events.

The finding has a cross-cutting aspect in the area of problem identification and resolution because Constellation did not effectively collect, evaluate, and communicate applicable external operating experience to affected internal stakeholders nor did they conduct self-assessments that were comprehensive, appropriately objective, and self-critical such that either Unit 1 2005 exam compromise issues were avoided altogether or identified and corrected prior to the end of the 2005 annual operating exam cycle.
Inspection Report# : 2006011 *(pdf)*

Significance:  Jan 18, 2007
Identified By: NRC
Item Type: FIN Finding
Unit 1 Crew Failure Rate on the Dynamic Simulator Portion of the Annual Operating Examinations
A finding of very low safety significance (Green) was identified at Unit 1. The finding was associated with crew performance on the simulator during the 2006 facility-administered requalification examinations. Of the six crews evaluated, two failed to pass their simulator examinations when the newly developed more comprehensive exams were re-administered in response to the above noted preliminary White finding. The failures are documented in licensee-initiated Condition Report CR 2006-5797, which resulted in Constellation conducting a Category I Root Cause Analysis.

This finding was more than minor because it was associated with the Human Performance attribute of the Initiating Events, Mitigation Systems, and Barrier Integrity cornerstones and affected the combined objective of: limiting the likelihood of; ensuring the availability and reliability of mitigating systems to respond to; and providing reasonable assurance that physical barriers protect the public from radio nuclide releases caused by, initiating events. The finding was assessed as having very low safety significance because: 1) the failures occurred during annual testing of the operators on the simulator; 2) there were no actual consequences to the failures; 3) the crews were removed from watch standing duties, retrained and re-evaluated before they were authorized to return to control room watches; and, 4) because the crew failure rate for the 2005 Unit 1 Annual Operating Exams was less than 20%.
Inspection Report# : 2006011 *(pdf)*

Significance:  Oct 20, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Design Control for Unit 1 EDG Raw Water Cooling System
The team identified a green, non-cited violation of 10CFR50, Appendix B, Design Control, in that measures had not been established to verify or check the adequacy of the Unit 1 Emergency Diesel Generator (EDG) cooling water design. Specifically, the EDG cooling water system hydraulic calculation did not account for flow resistance due to degradation of strainers or friction losses in the common return piping from the EDG 102 and 103 coolers. Additionally, the minimum acceptable pump performance allowed during testing, when combined with allowable system losses, did not ensure the design basis minimum flowrate would be provided to the EDGs under the most limiting conditions. Constellation performed an operability determination, initiated a standing order to monitor strainer differential pressure during EDG operation, and entered the strainer differential pressure and degradation of the common discharge piping issues into the corrective action program for resolution.
The finding is more than minor because it is associated with the design control attribute of the Mitigating System cornerstone and inadequate design control measures affect the objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low safety significance (Green) since it did not result in a loss of safety system function.
Inspection Report# : 2006008 *(pdf)*

Significance:  Oct 20, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Non-Conservative Assumptions in Safety Related Battery Sizing Calculation
The team identified a green, non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Control, for

Constellation's failure to ensure that adequate design control measures existed to verify the adequacy of the design capacity for the Unit 1 Battery 11. This resulted in non-conservative design inputs and a potential reduction in the battery's expected life. Constellation entered the concerns identified with the battery analysis of record into their corrective action program for resolution.

The finding is more than minor because it is associated with the design control attribute of the Mitigating System cornerstone and inadequate design control measures affect the objective to ensure the availability, reliability, and capability of the 125 VDC system which responds to initiating events to prevent undesirable consequences. Although the errors did reduce the design margin in all event scenarios, (Loss of Coolant Accident/Loss of Offsite Power, SBO & Appendix R) the impact was greatest for the Appendix R scenario.
The finding was determined to be of very low safety significance (Green) since it did not result in a loss of safety system function. While the expected life of the battery was reduced it was still determined to be operable. With respect to Appendix R, the issue was determined to be associated with the finding category of Post-Fire Safe Shutdown with a low degradation.
Inspection Report# : 2006008 *(pdf)*

Barrier Integrity

Significance:  Jun 29, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
Procedural Noncompliance Resulted In Failure to Establish Primary Containment Prior to Reactor Startup.
A self-revealing Green NCV of Unit 1 TS 6.4, "Procedures," occurred on April 2, 2007, when operators failed to resolve a position discrepancy identified with respect to the emergency cooling system (EC) vent line isolation valves prior to reactor startup following RFO 19. This resulted in the EC vent line isolation valves being left open, which represented an open pathway in the physical integrity of the reactor coolant and primary containment system boundaries. Upon discovery of the degraded barrier, operators immediately halted the startup and closed the valves. NMPNS entered the issue into its CAP as CR 2007-2380.
The finding is greater than minor because it is associated with the human performance attribute of the Barrier Integrity cornerstone and adversely affects the cornerstone objective to provide reasonable assurance that reactor coolant and containment system physical design barriers protect the public from radionuclide releases caused by accidents or events. The inspectors determined the finding to be of very low safety significance because even though the open valves were associated with the integrity of the reactor coolant system and containment they did not contribute to large early release frequency because the EC steam line vent to the reactor building (RB) equipment drain tank is less than two inches in diameter. This finding has a cross-cutting aspect in the area of human performance because operators failed to follow procedures (H.4.b).
Inspection Report# : 2007003 *(pdf)*

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 : August 24, 2007