Nine Mile Point 2
1Q/2008 Plant Inspection Findings

Initiating Events

Significance: G Sep 28, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate CCP system venting procedure resulted in loss of main CCP pumps
A self-revealing Green NCV of Unit 2 Technical Specification (TS) 5.4, “Procedures,” occurred when an inadequate procedure was used to vent the reactor building closed loop cooling water (CCP) system which resulted in tripping both CCP pumps on low suction pressure. NMPNS determined that the main CCP pumps tripped due to introduction of air into the CCP system when restoring the 1A spent fuel pool cooling (SFC) heat exchanger to its normal alignment. The procedure was not maintained to ensure proper CCP system venting when the 1A SFC heat exchanger supply water was shifted to CCP from service water. Operators restored one main CCP pump to service to stabilize conditions while the procedure was modified to recover normal CCP system configuration. The issue was entered into the corrective action program (CAP) as condition report (CR) NM 2007-4299. Corrective actions were to develop a procedure change to vent the SFC heat exchangers when shifting to CCP from service water, and to further evaluate the fill and vent requirements for the closed loop cooling systems.

The finding is greater than minor because it is associated with the equipment performance attribute of the Initiating Events cornerstone and adversely affects the cornerstone’s objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions. The inspectors determined the finding to be of very low safety significance based on an SDP Phase 2 analysis using the pre solved table for the NMPNS Unit 2 Site Specific Risk-Informed Inspection Notebook. This finding has a cross-cutting aspect in the area of human performance because NMPNS failed to maintain procedure accuracy when revising the CCP operating procedure (H.2.c per IMC 0305.) (Section 4OA3)

Inspection Report# : 2007004 *(pdf)*

Mitigating Systems

Significance: G Mar 31, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Correctly Perform Procedure Caused Inadvertent Isolation of RCIC Steam Supply
A self-revealing, non-cited violation (NCV) of Technical Specification (TS) 5.4, "Procedures," was identified on January 14, 2008, when technicians improperly performed a surveillance procedure which resulted in isolation of the Unit 2 RCIC system. Specifically, while performing a test of the area temperature instruments that provide high temperature isolation signals for the main steam system, technicians erroneously disconnected an electrical lead associated with the RCIC leak detection system. This resulted in an automatic isolation of the RCIC system steam supply and the unavailability of RCIC for approximately four hours. Operators immediately recognized the error and halted the surveillance procedure. Technicians reconnected the lead and operators restored RCIC to a normal standby lineup.

The finding was greater than minor because it was associated with the human performance attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone 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 in accordance with IMC 0609, Appendix A, "Determining the Significance of Reactor Inspection Findings for At-Power Situations," based on a Phase 3 analysis. The Region I senior reactor analyst (SRA) used the Nine Mile Point Unit 2 Standardized Plant Analysis Risk (SPAR) model and the

actual out-of-service time to determine the risk significance. This finding had a cross-cutting aspect in the area of human performance because of the ineffective use of human error prevention techniques (H.4.a per IMC 0305). (Section 1R22)

Inspection Report# : 2008002 *(pdf)*

Significance: G Dec 29, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate RCIC Room Temperature Channel Checks
An NRC-identified NCV of Unit 2 TS 3.3.6.1, "Primary Containment Isolation Instrumentation," occurred when NMPNS failed to perform Technical Specification (TS) required channel checks of the reactor core isolation cooling (RCIC) room area temperature instruments. This resulted in a failure to detect that the Division 1 instrument was malfunctioning. Immediate corrective actions were to replace the defective temperature instrument and to perform instrument cross-checks as a part of channel checks.

The finding was greater than minor because it resulted in an instrument malfunction not being promptly identified. The finding affected the equipment performance attribute of the Mitigating Systems cornerstone to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The impact of the 2ICS*TE16A malfunction was that it reduced the amount of time that would be available for operators to bypass the RCIC room area high temperature isolation to maintain RCIC operability during a station blackout event. The finding was evaluated in accordance with IMC 0609, Appendix A, and determined to be of very low safety significance (Green) per the SDP Phase one determination because the finding was not a design or qualification deficiency, did not represent a loss of system safety function or safety function of a single train, and did not screen as potentially risk significant due to external events. This finding had a cross-cutting aspect in the area of problem identification and resolution because NMPNS did not identify the inadequate channel checks in a timely manner (P.1.a per IMC 0305). (Section 1R15)

Inspection Report# : 2007005 *(pdf)*

Significance: G Dec 29, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
Loss of Shutdown Cooling due to Inadequate Maintenance Planning
A self-revealing NCV of Unit 2 TS 5.4, "Procedures," occurred when NMPNS failed to adequately implement procedure GAP-PSH-01, “Work Control,” while Unit 2 was in the refueling mode. Specifically, an unanticipated loss of shut down cooling (SDC) occurred because operators had not adequately assessed the operational impact of emergent maintenance to test a degraded reactor protection system (RPS) cable. As a result, establishing the electrical isolation for this maintenance initiated a Division 2 primary containment isolation system (PCIS) Group 5 isolation, which caused the associated isolation valve in the common SDC suction line to close. Operators promptly recognized the cause and restored shutdown cooling to service.

The finding was greater than minor because it was associated with the equipment performance attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone's objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was evaluated in accordance with IMC 0609, Appendix G, “Shutdown Operations Significance Determination Process." The finding was determined to be of very low safety significance (Green) because, although the finding resulted in there being less than one loop of RHR in SDC operation, it did not increase the likelihood of a loss of RCS inventory, degrade the ability to terminate a leak path or add RCS inventory if needed, or degrade the ability to recover decay heat removal. This finding had a cross-cutting aspect in the area of human performance because NMPNS failed to adequately assess the impact of the emergent work activity on plant operations (H.3.b per IMC 0305). (Section 1R20)

Inspection Report# : 2007005 *(pdf)*

Significance: G Sep 28, 2007

Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Procedure for Installation of a Design Change Resulted in Inadvertent Discharge of the CO2 Suppression System
A self-revealing Green NCV of Unit 2 TS 5.4, “Procedures,” occurred when an inadequate procedure was used for installation of a fire protection modification. Specifically, the installation procedure enabled plant technicians to establish an electrical circuit that initiated an unanticipated CO2 suppression system discharge into the Division 3 switchgear room. An Alert was declared in accordance with NMPNS’ emergency plan based on the presence of a toxic gas in an area required for safe shutdown. Operators took immediate corrective actions and isolated the CO2 supply to the suppression system using manually operated valves, and implemented compensatory measures for the suppression system isolation. NMPNS planned to develop additional corrective actions after completion of the root cause analysis of this event under CR NM-2007-5538.

The finding is greater than minor because it is associated with the external factors attribute of the Mitigating Systems cornerstone and adversely affects the cornerstone’s objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding to be of very low safety significance in accordance with IMC 0609, Appendix F, "Fire Protection Significance Determination Process," because the performance and reliability of the suppression system would be minimally impacted by the inspection finding; specifically, action to manually unisolate the system would be required before the system could be used. This finding has a cross-cutting aspect in the area of human performance because NMPNS failed to develop an accurate work package for implementation of the fire protection system design change (H.2.c per IMC 0305.) (Section 4OA3)

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: N/A Jun 28, 2007
Identified By: NRC
Item Type: FIN Finding

Problem Identification & Resolution

Overall, the inspection team determined that the Corrective Action Program (CAP) at Constellation's NMPNS was generally effective in the identification, evaluation, and resolution of problems. The inspection team determined that NMPNS typically identified problems and placed them in the CAP. The inspection team identified that operating experience was utilized and considered at NMPNS, although certain issues at Unit 1 were not fully assessed in all aspects. The inspection team noted that NMPNS was effective in conducting root cause and apparent cause evaluations and effectively resolved most problems categorized as more significant. Based on interviews, observations of plant activities, reviews of the CAP and the Employees Concerns Program, the inspection team determined that site personnel were willing to raise safety issues.

Inspection Report# : 2007006 *(pdf)*

Last modified : June 05, 2008