

Nine Mile Point 1

2Q/2011 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2011

Identified By: Self-Revealing

Item Type: FIN Finding

Inadequate Procedural Guidance for Main Turbine and Generator Maintenance Activities

A Green self revealing finding for inadequate procedural guidance was identified. The inadequate procedural guidance resulted in a May 2, 2011 Nine Mile Unit 1 scram due to a turbine trip. NMPNS determined that the turbine tripped when the main turbine master trip solenoid (MTS) actuated due to pressure fluctuations caused by a combination of leaking oil supply fittings to the MTS; binding of the secondary speed relay linkages, and main shaft lube oil discharge pressure fluctuations. These degraded conditions occurred because the governing work control documents and procedures that were implemented during the spring 2011 refuel outage contained inadequate detail and guidance. NMPNS corrective actions included repairing the degraded components and initiating actions to revise the procedures.

This finding is more than minor because it affected the procedure quality attribute of the Initiating Events 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 finding was of very low safety significance because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. This finding has a cross-cutting aspect in the area of human performance in that NMPNS did not ensure that complete and accurate and up-to-date design documentation and procedures were available to implement turbine maintenance during the spring 2011 refuel outage.

Inspection Report# : [2011003](#) (*pdf*)

Significance:  Dec 31, 2010

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Reactor Scram due to Inadequate Post-Maintenance Testing

A self-revealing finding of very low safety significance associated with a non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified when previously unidentified inadequate electrical connections for two solenoid operated valves (SOVs) in the control air system for the Nine Mile Point Nuclear Station (NMPNS) Unit 1 outboard main steam isolation valves (MSIVs) led to an inadvertent closure of the outboard MSIVs and resultant reactor scram. The SOV electrical connections had not been identified as defective after installation due to inadequate postmaintenance testing. As immediate corrective action, the plant was taken to cold shutdown and an investigation into the cause of the event was commenced. The issue was entered into the corrective action program (CAP) as condition report (CR) 2010-11008.

The finding was more than minor because it was associated with the procedure quality attribute of the Initiating Events cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Additionally, the finding was similar to example 4.b in Appendix E of Inspection Manual Chapter (IMC) 0612, in that it resulted in a reactor scram. 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) evaluated the safety significance of the finding using the

Systems Analysis Programs for Hands-on Integrated Reliability Evaluations (SAPHIRE) and Nine Mile Point Unit One Standardized Plant Analysis Risk (SPAR) models. The finding did not have a cross-cutting aspect because the performance deficiency did not occur within the past three years and therefore was not reflective of present performance.

Inspection Report# : [2010005](#) (*pdf*)

Mitigating Systems

Barrier Integrity

Significance:  Mar 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Corrective Actions to Correct Motor Control Center Spring Clip Engagement Issues

The inspectors identified a finding of very low safety significance associated with a non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for Nine Mile Point Nuclear Station's (NMPNS) failure to take adequate corrective actions for a condition adverse to quality. Specifically, between January 26, 2009, and November 29, 2010, NMPNS did not implement adequate corrective actions to address a lack of spring clip engagement for 600 volt General Electric 7700 line motor control centers (MCCs). As a result, the breaker for the control room emergency ventilation system fan failed to correctly operate when required. NMPNS entered this issue into its corrective action program (CAP) and implemented a physical verification of spring clip engagement.

The finding was more than minor because it was associated with the structure, system, and component (SSC), and barrier performance attribute of the Barrier Integrity cornerstone, and affected the cornerstone objective to provide reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. The finding was determined to be of very low safety significance, because the finding did not represent a degradation of the radiological barrier function of the control room, and the finding did not represent a degradation of the barrier function of the control room against smoke or a toxic atmosphere. This finding had a cross-cutting aspect in the area of problem identification and resolution, corrective action program component, because NMPNS did not thoroughly evaluate the initial component failures such that the resolutions addressed the causes and extent of conditions. Specifically, NMPNS did not properly prioritize and evaluate spring clip engagement issues over 22 months.

Inspection Report# : [2011002](#) (*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

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