McGuire 1 3Q/2003 Plant Inspection Findings

Initiating Events

Significance: G Mar 22, 2003 Identified By: Self Disclosing Item Type: NCV NonCited Violation

Failure to Follow Main Turbine Valve Movement Test Procedure

A self-revealing NCV was identified for failure to meet TS 5.4.1 by failing to follow PT/1/A/4250/004A, Turbine Valve Movement Test, on February 1, 2003, due to an operator incorrectly raising governor valve demand when the procedure required lowering governor valve demand. This resulted in a reactivity excursion and reactor power increase. Although this finding contributed to the likelihood of a reactor trip, this issue was determined to be of very low safety significance because mitigation equipment was not affected. This error in following procedural guidance in response to a recognized plant condition is indicative of a human performance deficiency. (Section 1R22.1)

Inspection Report# : 2003002(pdf)

Mitigating Systems

Significance: G Sep 13, 2003

Identified By: NRC Item Type: NCV NonCited Violation

Failure to take Prompt Actions to Resolve Control Room Environmental Chiller Issue

A non-cited violation (NCV) of 10CFR50, Appendix B, Criterion XVI, Corrective Action, was identified by the inspectors for failure to take prompt action to remedy an identified problem documented in a Problem Investigation Process report (PIP) associated with the ability to restart control room cooling following a station blackout (SBO) event. This finding was considered to be more than minor based on the fact that subsequent NRC review revealed that the licensee had been untimely in initiation of corrective action. The lack of corrective actions in an existing PIP could lead to untimely action to mitigate response to a SBO event. The licensee had committed to respond to a SBO event by re-energizing a train of control room chillers shared between the two Units within forty five minutes. However, on March 31, 1999, the licensee identified that the time for chiller re-energization may be as great as 2 hours. The licensee did not identify the corrective actions necessary to understand the expected consequences of the temperature rise in the control room as a result of the increased time to re-energization. Therefore, the mitigation systems and cornerstone objective of ensuring the continued reliability of equipment needed to respond to a postulated event (10 CFR 50.63) could be affected. This issue was considered to be of very low safety significance because there was no actual loss of function of a safety train or system and no design or qualification issue. (Section 1R12) Inspection Report# : 2003004(pdf)

Significance: Jun 21, 2003

Identified By: NRC Item Type: NCV NonCited Violation

Corrective actions not adequate to prevent second fire from occurring on the roof of EDG 1A

The inspectors identified a non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, for corrective actions that were not adequate to prevent a second fire from occurring on the roof of the Unit 1 emergency diesel generator (EDG) building when the EDG 1A was operated on two separate occasions. The licensee's immediate corrective action for the initial emergency diesel generator roof fire were inadequate to prevent a second fire from recurring. This finding is greater than minor because it was associated with protection against one of the external factors (fire) attribute and affected the objective of the mitigating systems cornerstone to ensure the availability, reliability and capability of systems that respond to initiating events. In addition, this finding could have resulted in an unnecessary challenge to plant operators during response to initiating events requiring the EDGs for mitigation (i.e., loss of offsite power events). The additional challenge to operators could have resulted in reduced availability, reliability, and capability of the EDGs during these events. This finding was determined to be of very low safety significance because neither fire caused the EDG 1A to be inoperable.

Inspection Report# : 2003003(pdf)



Significance: Mar 22, 2003

Identified By: Self Disclosing Item Type: NCV NonCited Violation

Failure to Follow Maintenance Procedure for FWST Level Instrument Freeze Protection System

Inadequately installed freeze protection resulted in freezing of the refueling water storage tank (FWST) level instrument lines during adverse cold weather on January 24, 2003. A self-revealing NCV of Technical Specification 5.4.1.a was identified for failure to follow a maintenance procedure for work on the FWST level instrument freeze protection system. The finding is greater than minor because the safety function that these channels provide to the automatic switchover feature was lost. This finding was of very low safety significance because of the short time interval that the three channels were inoperable. (Section 1R01)

Inspection Report# : 2003002(pdf)



Significance: Mar 22, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Corrective Action to prevent Gas Accumulation in the Residual Heat Removal System Following **Refueling Outage**

An NCV was identified for failure to comply with 10 CFR 50, Appendix B, Criterion XVI, Corrective Action, regarding repetitive gas accumulation in the ECCS piping following refueling outages. This finding is greater than minor because some gas would be directed through the ECCS pumps, thereby affecting their reliability. This finding was of very low safety significance due to the determination that the majority of the gas would have been released from the ECCS piping into the containment volume via back leakage through the ECCS sump valves upon sump realignment and prior to sweeping the gas to the ECCS pumps. Since the resolution for a previous ECCS venting problem was not adequate, this finding is indicative of a potential corrective action thoroughness deficiency. (Section 1R15) Inspection Report# : 2003002(pdf)



Identified By: NRC Item Type: NCV NonCited Violation **Inadequate Performance of Unit 1 ECCS Recirculation Sump Inspection** An NCV of Technical Specification (TS) 5.4.1.a. was identified for the inadequate performance of a Unit 1 containment cleanliness inspection which partially implements TS 3.5.2.8 to ensure debris is not present in the area of the ECCS sump. Prior to this identification, the licensee had previously completed inspections for debris in accordance with Nuclear Site Directive (NSD) 104, Material Condition/Housekeeping, Cleanliness/Foreign Material; however, the licensee's containment inspections failed to identify the adverse condition. The finding was more than minor because it could have had a credible impact on safety by reducing the reliability of the ECCS pumps during accident scenarios due to potential blocking of the ECCS sump. The finding was of very low safety significance based on corrective actions taken to contain the fibrous insulation prior to entering a Mode of operation where the ECCS sump was required to be operable. (Section 1R20)

Inspection Report# : 2002004(pdf)

Barrier Integrity

Significance: Jun 21, 2003 Identified By: Self Disclosing Item Type: NCV NonCited Violation

Failure to Follow Maintenance Procedure for Hydrogen Mitigation System

A self-revealing, non-cited violation of Technical Specification 5.4.1.a was identified for failure to follow maintenance instructions for work on the hydrogen mitigation system. This violation was caused by a human performance error which rendered a train of the hydrogen mitigation system inoperable while the redundant train was removed from service due to maintenance. This finding is greater than minor because the safety function that this system provides to minimize containment pressure excursion in post accident environments was lost. This finding was of very low safety significance due to the short time interval when both trains were inoperable. (Section 1R12) Inspection Report# : 2003003(pdf)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Significance: Mar 22, 2003 Identified By: NRC Item Type: NCV NonCited Violation Failure to conduct adequate surveys of the Unit 1 and Unit 2 Main Plant Vent Particulate Radionuclides The licensee failed to have proper sample line configuration and flow characteristics to assure sample

representativeness of particulate radionuclides collected for monitoring and quantifying the Unit 1 and Unit 2 Main Plant Vent airborne effluents in accordance with the Selected Licensee Commitment (SLC) Manual Table 11.7.11-1. An NCV of 10 CFR 20.1501(a) was identified. This violation is greater than minor in that the failure to have proper sample line configurations and flow characteristics could result in non-representative collection of particulate radionuclides used to evaluate doses to members of the public from airborne effluent releases. This issue is associated with the process attributes of the Public Radiation Safety Cornerstone and affected the cornerstone objective to protect public from exposure to radiation. The violation is of very low safety significance because current operations have resulted in negligible release of particulate radionuclides and resultant doses to the public (Section 2PS1.1). Inspection Report# : 2003002(pdf)

Physical Protection

Miscellaneous

Last modified : December 01, 2003