

McGuire 2

Initiating Events

G**Significance:** Mar 23, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Failure to Follow Steam Pressure Loop Instrument Test Resulting in Reactor Trip

Licensee Identified Violation of Technical Specification 5.4.1., which requires that written procedures shall be implemented covering the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Regulatory Guide 1.33 requires procedures for surveillance tests. On July 16, 2001, maintenance technicians failed to follow surveillance procedure IP/2/A/3001/002E and improperly isolated the wrong channel, initiating a Unit 2 reactor trip. This issue was more than minor because it had an actual impact on safety, in that, it initiated a reactor trip. This issue was determined to be of low safety significance because although it did initiate a reactor trip, it did not affect mitigating equipment and the impact of the reactor trip was minimal.

This event is in the licensee corrective action program as PIP M-01-3139 (Section 4OA7)

Inspection Report# : [2001005\(pdf\)](#)G**Significance:** Mar 23, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Inadequate Maintenance Procedure Resulted in NC System Leakage Event

Licensee Identified Violation of Technical Specification 5.4.1., which requires that written procedures shall be established covering the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Regulatory Guide 1.33 requires procedures for maintenance. On January 15, 2002, work procedures for maintenance on valve 1NV414 were performed that did not contain adequate precautions to control plant conditions. This resulted in a Unit 2 reactor coolant system leak. This issue had a credible impact on safety because the leak exceeded TS allowed values. This issue was determined to be of very low safety significance because the source of the leak was promptly isolated by operators, the leak was within the capacity of makeup flow to the VCT, leakage was directed to a boric acid tank, and the leak did not disable any mitigating systems. This issue was entered into the licensee's corrective action program as PIP M-02-0177 (Section 4OA7).

Inspection Report# : [2001005\(pdf\)](#)

Mitigating Systems

G**Significance:** Mar 23, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Performance of ECCS Recirculation Sump Inspection (Section 1R20)

A Non-Cited Violation of Technical Specification (TS) 5.4.1.a. was identified for the inadequate performance of a surveillance inspection of the Unit 2 Emergency Core Cooling System (ECCS) sump. The licensee had completed this TS required inspection, but failed to identify or evaluate an abnormal amount of hardened boric acid deposits plated out within the sump. 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 when undissolved pieces of the boric acid could enter the suction of the pumps and cause possible damage to the pumps. The finding was of very low safety significance based on the determination that mitigation systems were previously capable of performing their safety function. (Section 1R20). A licensee identified second example of this NRC identified NCV was identified in IR 02-02 (Section 4OA7). Specifically, the performance of PT/1/A/4700/056, Unit 1 Containment Building Civil Structures Inspection, failed to identify the accumulation of boron and other foreign material within in the ECCS sump until corrective actions by the licensee identified it on April 18, 2002. The finding was of very low safety significance because mitigation systems were concluded to have been past operable based on engineering analysis performed by the licensee.

Inspection Report# : [2001005\(pdf\)](#)G**Significance:** Sep 15, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Compensatory Measures Result in Degradation of Flood Mitigation Function for EDG Areas

A non-cited violation of Technical Specifications (TS) 5.4.1.a. was identified involving degradation of the flood mitigation function for the emergency diesel generator (EDG) areas. Specifically, the inspectors identified that station personnel responsible for implementing compensatory measures for flood protection on July 10, 2001, were not cognizant of their responsibilities and that the associated flood protection procedures were inadequate to ensure timely closure of a flood door protecting the Unit 1 EDGs from a design basis turbine building flood. This condition was assessed over a six hour time period on July 10, 2001, as well as similar periods of time over the last 18 months when the subject door in either unit was opened without any discernable compensatory action in place. This finding was determined to be of very low safety significance (Green). This was due to the relatively small period of duration per year, and the minimal effects that turbine building flooding would have on the availability of offsite power for those periods in question. (Section 1R06)

Inspection Report# : [2001003\(pdf\)](#)



Significance: Mar 17, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

Failure to Follow Procedure PT/2/A/4350/026C, Auxiliary Shutdown Panel Verification

Failure to follow procedure (Technical Specification 5.4.1) for PT/2/A/4350/026C, Auxiliary Shutdown Panel Verification. The procedure indicates that all manipulations of controls at the panel shall be performed by a licensed reactor operator. A non-licensed operator performed the auxiliary shutdown manipulations during the performance of the test, contrary to the requirements of the procedure. This is captured in the licensee's corrective action program under PIP M-00-4140. This finding was determined to have very low safety significance and is being treated as a Non Cited Violation (Section 4OA7).

Inspection Report# : [2000007\(pdf\)](#)



Significance: Dec 16, 2000

Identified By: Licensee

Item Type: NCV NonCited Violation

Inadequate procedure for removal of 120VAC inverters from service

Inadequate procedure (TS 5.4.1) for removal of Unit 2 120VAC vital inverters from service. During plant solid RCS operation in Mode 5, de-energizing the vital inverters resulted in an inoperable Low Temperature Overpressure Protection (LTOP) system required by Technical Specification 3.4.12. The finding was determined to have very low safety significance (Section 4OA7).

Inspection Report# : [2000006\(pdf\)](#)



Significance: Dec 15, 2000

Identified By: NRC

Item Type: FIN Finding

Depth and effectiveness of the licensee's evaluation and corrective actions for failures of the standby shutdown facility (SSF) diesel generator.

A finding was identified associated with the depth and effectiveness of the licensee's evaluation and corrective actions for failures of the standby shutdown facility (SSF) diesel generator. The licensee's corrective actions for recent SSF-related problems have not been commensurate with the risk significance of the system. A recent Problem Investigation Process report, which documented a jacket water coolant leak and subsequent emptying of the engine's radiator, was not screened to include a root cause evaluation. The licensee did not perform comprehensive corrective actions to evaluate the need for performing additional preventive maintenance on the SSF diesel generator components. The inspectors identified vendor-recommended maintenance practices that were not being implemented and service bulletins authored by the vendor that were not included in the associated controlled vendor manual located on site. This issue was determined to have very low safety significance because it was not directly linked to any specific period of unavailability for the SSF diesel generator. This instance of ineffective corrective action was an isolated example and is not considered indicative of the licensee's overall corrective action program. (Section 4OA2b).

Inspection Report# : [2000010\(pdf\)](#)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Significance:  Mar 23, 2002

Identified By: Licensee

Item Type: NCV NonCited Violation

Failure to Control Two Areas as Locked High Radiation Areas

Contrary to TS 5.7.2, during fuel movement on March 2, 2002, two areas were identified by the licensee with general area dose rates exceeding 1000 mrem/hr which were not controlled as locked high radiation areas and were accessed by individuals. This issue was determined to be of very low safety significance based on the location of the elevated dose rates relative to the individuals' work areas, appropriate worker actions including exiting the area when elevated dose rates were initially detected, and monitoring results which indicated no significant unexpected exposures were received by the workers. This issue is documented in the licensee's corrective action program as PIPs M-02-01017 and M-02-01018 (Section 4OA7).

Inspection Report# : [2001005\(pdf\)](#)

Significance:  Mar 23, 2002

Identified By: Licensee

Item Type: NCV NonCited Violation

Failure of an Individual to Respond Appropriately to an Alarming ED

Contrary to TS 5.7.1, on February 27, 2002, an individual worker in the Unit 2 Reactor Building, posted as a high radiation area, failed to respond appropriately to his Electronic Dosimeter (ED) integrated dose alarm. This issue was determined to be of very low safety significance based on monitoring results which indicated the worker was in low dose rate areas within the posted high radiation area when the alarm sounded and no over-exposures occurred. This issue is documented in the licensee's corrective action program as PIP M-02-00907 (Section 4OA7).

Inspection Report# : [2001005\(pdf\)](#)

Public Radiation Safety

Physical Protection

Significance:  Jun 16, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Proper Search of Individuals Entering Protected Area

A non-cited violation was identified when a security officer failed to properly search two individuals prior to allowing them unescorted access to the protected area. Requirements violated were established in the McGuire Physical Security Plan and implementing procedures. While the risk was low in this case, this issue was identified as more than a minor finding because granting site access to individuals who have not been properly searched can have a credible impact on safety. Additionally, the granting of access to improperly searched individuals can be viewed as a precursor to a significant event. Using the Physical Protection Significance Determination Process and identifying this finding as a vulnerability in Access Control, without a malevolent act, and with fewer than two similar findings in four quarters, the issue was determined to be within the licensee's response band and a Green finding. (Section 3PP2)

Inspection Report# : [2001002\(pdf\)](#)

Significance:  Sep 16, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

Failure of the Electronic Switching to Provide the Central Alarm Station Operator with the Capability to Properly Assess Potential Penetrations at the Perimeter Prior to Individuals Gaining Access

A non-cited violation of the Physical Security Plan was identified for the failure of the licensee's electronic switching on September 12, 2000, to provide the central alarm station operator with the capability to properly assess potential penetrations at the perimeter

prior to individuals gaining access to the protected area (Section 3PP3.2)

Inspection Report# : [2000005\(pdf\)](#)

Miscellaneous

Significance: N/A Dec 15, 2000

Identified By: NRC

Item Type: FIN Finding

Identification and Resolution of Problems

Overall, the licensee's corrective action program was effective at identifying, evaluating, and correcting problems. The threshold for entering problems into the corrective action program was sufficiently low. Reviews of operating experience information were comprehensive. In general, the licensee properly prioritized items (by Action Category) in its corrective action program database, which ensured that timely resolution and appropriate causal factor analyses were employed commensurate with safety significance. One exception involved a recent condition adverse to quality in which the standby shutdown facility's (SSF) diesel generator was unavailable following the complete draining of radiator coolant because of heater shell pin-hole leaks. The licensee did not perform an in-depth root cause analysis and thorough corrective actions following its discovery of the degraded condition. Also, for potential safety equipment operability issues, the licensee did not always conduct or document thorough evaluations of present or past inoperability. Previous non-compliance issues documented as non-cited violations were properly tracked and resolved via the corrective action program. The results of the last comprehensive corrective action program audit conducted by the licensee (September 1999) were properly entered and dispositioned in the corrective action program. Based on discussions with plant personnel and the apparently low threshold for items entered in the corrective action program database, the inspectors concluded that workers at the site generally felt free to raise safety concerns to their management.

Inspection Report# : [2000010\(pdf\)](#)

Last modified : July 22, 2002