

McGuire 1

Initiating Events

Significance:  Mar 23, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Failure to Follow Power Ranger Test Procedure

Licensee Identified Violation of Technical Specification 5.4.1.a, 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 January 14, 2002, maintenance technicians failed to follow surveillance procedure PT/1/A/4600/014D, NIS Power Range N-41 Analog Channel Operational Test, by bypassing the incorrect power mismatch channel. As a result of this error and the performance of the procedure, Unit 2 control rods inserted until plant operators terminated the rod movement. This finding had a credible impact on safety because the maintenance technicians' error caused a reactivity change which resulted in a challenge to plant operators. This issue was determined to be of low safety significance because of prompt operator action and because it did not result in a significant plant transient. This issue was entered into the licensee's corrective action program as PIP M-02-0140 (Section 40A7)

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

Significance:  Mar 17, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

Inadequate Corrective Actions for Recurring Problems with Shutdown Operations Involving Loss of Letdown and/or Inadvertent Reactor Coolant System Cooldown Transients

Inadequate corrective actions (10CFR50, Appendix B, Criterion XVI) for recurring problems with shutdown operations involving loss of letdown and/or inadvertent reactor coolant (NC) system cooldown transients. During a Unit 1 shutdown from Mode 2 to Mode 3 on March 9, 2001, NC system temperature went below minimum temperature for criticality due to overfeed of steam generators. This event occurred because of ineffective corrective actions to address procedural deficiencies and/or equipment problems complicating plant cooldown. This is captured in the licensee's corrective action program under PIP M-01-0986. This finding was determined to have very low safety significance and is being treated as a Non Cited Violation (Section 40A7).

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

Mitigating Systems

Significance:  Sep 14, 2002

Identified By: NRC

Item Type: FIN Finding

Not Considering the TS Bases Required Operating Time in an Operability Determination

A finding was identified for not considering the Technical Specification (TS) bases required operating time in an operability determination for equipment in a degraded condition. Following the discovery of a refrigerant leak on the A control room area chiller, the licensee concluded that the condition did not affect operability. However, in making the determination, the licensee did not consider the design bases of the control room area chilled water system to maintain the control room temperature for 30 days of continuous occupancy. Upon considering the TS bases operating time

without establishing compensatory measures, the licensee declared the train inoperable. Not considering the TS bases operating requirements in operability determinations with equipment in degraded conditions could become a more significant safety concern because it may result in TS LCOs not being met. This finding was determined to be of very low safety significance (Green) because the A train control room area chiller was not inoperable for greater than its TS allowed outage time. (Section 1R15).

Inspection Report# : [2002003\(pdf\)](#)

G

Significance: Sep 14, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Inadequate Corrective Actions to Prevent Recurrence of ND Pump Discharge Check Valve Sticking Open

A self-revealing non-cited violation of 10 CFR 50, Criterion XVI, was identified for a failure of licensee corrective actions to effectively modify the Unit 2A residual heat removal (ND) pump discharge check valve (2ND-23) to preclude it from sticking open following a similar event on the opposite Train valve in April 1999. This resulted in valve 2ND-23 sticking open during system flushing in April 2002, rendering both trains of ND inoperable. If left uncorrected, this issue could have become a more significant safety concern, because it could have affected the functional capability of the ND system. This finding, which was evaluated using Phase II of the SDP and reviewed by a regional Senior Reactor Analyst, was determined to be of very low safety significance. This determination reflects the fact that this issue only becomes a potential problem during the injection phase of a large break loss of coolant accident when the Train of ND with the stuck open check valve fails to start and/or run following the associated safety injection signal. (Section 4OA3.2)

Inspection Report# : [2002003\(pdf\)](#)

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\(pdf\)](#)

G

Significance: Sep 15, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate ECCS Venting Procedure Results in ECCS Piping Voids

A non-Cited Violation of TS 5.4.1.a. was identified for an inadequate surveillance procedure, which resulted in the operation of Unit 1 with a significant quantity of gas in the emergency core cooling system (ECCS) beneath the ECCS recirculation sump valves. This unknown condition adverse to quality existed for approximately 21 days. The procedure failed to provide adequate instructions such that the timing of ECCS venting, as required by Technical Specification Surveillance Requirement 3.5.2.3., was coincident with system conditions which would facilitate adequate venting. The licensee's initial review of this condition failed to adequately address the potential consequences of the gas in the ECCS system nor was the cause of the gas fully evaluated. The finding was more than minor because it could have had a credible impact on safety by reducing the reliability of the ECCS system by the ingestion of gas

through the ECCS pumps. Additionally, if left uncorrected, a slightly higher gas accumulation could result in redundant trains of the ECCS being inoperable. The finding was of very low safety significance because mitigation systems were concluded to be past operable based on the engineering analysis performed. (Section 1R15.2)

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

Significance:  Sep 15, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

Failure to Meet Requirements of TS LCO 3.6.14. for containment divider barrier hatch not being in the closed position

Contrary to TS LCO 3.6.14., on June 21, 2001, the licensee identified that a Unit 1 containment divider barrier system access hatch was not in the closed position as required by TS. In addition, contrary to TS SR 3.6.14.2 , the licensee failed to verify that the sealing surfaces of the hatch had no detrimental misalignments due to the door not being fully closed. The hatch is required to be closed to prevent excess steam bypass away from the ice condenser system during a high-energy line break inside containment. Although the analyzed peak upper containment pressure would have increased for this post-accident condition, the licensee was able to demonstrate through calculations that the containment remained operable with the hatch not fully secured. This issue is captured in the licensee's corrective action program under PIP M-01-2854 and is being treated as a NCV.

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

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\(pdf\)](#)

Significance:  Jun 17, 2000

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Failure to Follow Emergency Procedure Concerning Auxiliary Feedwater Suction Supplies

A non-cited violation of Technical Specification 5.4.1.a was identified for two examples of the licensee's failure to follow the emergency procedure generic enclosure used for maintaining auxiliary feedwater (CA) suction sources during reactor trip recovery. This resulted in the inadvertent isolation of the preferred CA suction supply and actuation of the service water system to provide CA to the steam generators. A lack of training and familiarity with the applicable emergency procedure generic enclosure was found to be a contributor to this finding. The safety significance of this violation was very low because the CA system was able to perform its function of steam generator decay heat removal (Section 04.03).

Inspection Report# : [2000008\(pdf\)](#)

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 40A7).

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 40A7).

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: G 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 Aug 29, 2002

Identified By: NRC

Item Type: FIN Finding

PROBLEM IDENTIFICATION & RESOLUTION

The inspectors concluded that, in general, problems were properly identified, evaluated, and corrected. The licensee was effective at identifying problems and entering them in the corrective action process. Generally, issues were prioritized and evaluated appropriately, and in a timely fashion. The evaluations of significant problems were of sufficient depth to determine the likely root or apparent causes, as well as address the potential extent of the circumstances contributing to the problem and provide a clear basis to establish corrective actions. Corrective actions that addressed the causes of problems were generally identified and implemented. Reviews of sampled operating experience information were comprehensive. Licensee audits and assessments were found to be adequately broad based and effective in providing management a tool for identifying adverse trends. 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 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. The inspectors identified that an element of the corrective action program had not been fully developed, in that limited quarterly trending of issues was performed.

Inspection Report# : [2002007\(pdf\)](#)

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 : December 02, 2002