### McGuire 1 2Q/2008 Plant Inspection Findings

# **Initiating Events**

# **Mitigating Systems**

Significance: SL-IV Jun 30, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Update the FSAR to Reflect Those Portions of RN Shared Between Units (Section 1R11.1)
The inspectors identified a non-cited violation of 10 CFR 50.71(e) for the failure to update the Updated Final Safety
Analysis Report (UFSAR) to include information related to those portions of the nuclear service water (RN) system
that are shared between Units, as reflected in License Amendments issued for both Units on January 4, 1988.

This issue was greater than minor because the failure to include in the UFSAR the designation of which portions of the RN system were shared between units, as described in the License Amendments, was material to the NRC's review of the licensee's response to Generic Letter 91-13, Request for Information related to the Resolution of Generic Issue 130, "Essential Service Water System Failures at Multi-Unit Sites." The licensee's response revealed that they had procedures that allowed sharing of the RN discharge, which was specifically designated as not shared in Figure 7-1 of the Technical Specifications. As such, the UFSAR could not be relied upon to determine the shared portions and their safety implications. However, the inspectors found no subsequent changes made to the facility that were based on the erroneous information in the UFSAR section. Consequently, this issue was considered to meet the criteria of a severity level IV violation. This finding has a cross-cutting aspect of thorough evaluation in the area of problem identification and resolution [P.1.(c)]. (Section 1R11.1)

Inspection Report# : 2008003 (pdf)



Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Scope Main Feedwater Tempering Line Valves Into the Maintenance Rule Monitoring Program (Section 1R12)

The inspectors identified a non-cited violation of 10 CFR 50.65(b)(2)(i) for failure to scope the credited main feedwater tempering lines (one per steam generator) and associated valves into the Maintenance Rule monitoring program.

This finding was more than minor because, similar to Example 7.d of NRC Inspection Manual Chapter (IMC) 0612 Appendix-E, "Examples of Minor Issues," effective control of component condition could not be demonstrated, since the appropriate preventative maintenance was not being performed due to not being

scoped into the Maintenance Rule monitoring program. The licensee satisfactorily tested the functionality of the eight manual valves (two per tempering line) on each unit within the past few years, providing reasonable assurance that the manual valves would operate as required if needed. However, the functionality of the four check valves (one per tempering line) on each unit and the associated flow paths could not be demonstrated at this time; but, the licensee did perform an evaluation of all potential failure mechanisms and determined that the check valves would likely perform their function. The inspectors determined this finding to have very low safety significance, using NRC IMC 0609.04 "Phase 1 Initial Screening," in that this finding did not represent an actual loss of safety function for equipment designated as risk significant per 10 CFR 50.65, and was not risk significant for external initiating events. (Section 1R12)

Inspection Report# : 2008003 (pdf)

Significance: Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to Establish and Maintain Abnormal Procedures for Loss of Nuclear Service Water (Section 1R11)** The inspectors identified a non-cited violation (NCV) of Technical Specification (TS) 5.4.1.a. for failure to adequately establish and maintain procedures required by Regulatory Guide 1.33, Appendix A, Section 5, Procedures for Abnormal Conditions. Specifically, loss of nuclear service water (RN) procedures were not established and maintained with an adequate safety analysis for the sharing of nuclear service water between units.

This finding is more than minor because it affects the availability, reliability, and capability of the RN system (ultimate heat sink) and is related to the design control and procedure quality attributes of the mitigating systems cornerstone. In addition, this finding could be reasonably viewed as a precursor to a significant event (i.e. loss of RN on both units). The issue was determined to be of very low safety significance in IMC 0609 SDP Phase 1 screening based on the fact that this finding did not represent an actual loss of system safety function nor a loss of a single train of RN for greater than its Technical Specification allowed outage time, because these procedural steps had never been used. This finding has a cross-cutting aspect of resources in the area of human performance [H.2.c] because the licensee failed to ensure that procedures had complete, accurate and up-to-date design documentation to assure nuclear safety. (Section 1R11)

Inspection Report# : 2008002 (pdf)

**Significance:** Mar 31, 2008 Identified By: NRC Item Type: NCV NonCited Violation

Nuclear Service Water System Flow Analysis Deficiencies (Section 40A5.2)

The inspectors identified a NCV of 10 CFR 50, Appendix B, Criterion III, Design Control, for failure to establish measures to verify the design capability of the RN pumps. Specifically, the licensee did not perform system hydraulic analyses or use other means to demonstrate that RN pumps 1A and 1B could perform their safety function under the most limiting design basis conditions.

This finding is more than minor because it affected the design control attribute of the mitigating systems cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors assessed the finding using the SDP and determined that the finding was of very low safety significance because subsequent engineering analysis, completed in March 2008, demonstrated there was no loss of RN system safety function capability when the worst case design basis accident (DBA) limiting values were input into the RN system flow analysis. (Section 4OA5.2)

Inspection Report# : 2008002 (pdf)

**Significance:** Dec 31, 2007 Identified By: NRC Item Type: NCV NonCited Violation

**Failure to Take Adequate Corrective Action for a Nonconformance Associated with ECCS Throttle Valves** The inspectors identified a non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion XVI, for failure to take adequate corrective action for a nonconformance associated with potential clogging of the Unit 1 emergency core cooling system (ECCS) cold leg injection throttle valves during high pressure recirculation. The inadequate corrective actions involved inspections of the ECCS sump, which were found to be ineffective as evidenced by the unrelated discovery of significant amounts of debris.

This issue is greater than minor because, if left uncorrected, the transportable soft debris could have a detrimental affect on the availability and reliability of both trains of ECCS when called upon during an accident. In particular, the debris had the potential to have detrimental effects on the high pressure recirculation function due to potential clogging of the ECCS throttle valves which have openings. The issue was determined to be of very low safety significance based on the NRC evaluation documented in NRC Inspection Report 05000370/2007010, of similar quantities of soft debris in the Unit 2 ECCS sump and of similar throttle valve openings. This finding has a cross-cutting aspect of appropriate corrective actions in the area of problem identification and resolution (P.1.(d)). (Section

4OA5.2) Inspection Report# : <u>2007005</u> (*pdf*)

#### **Significance: SL-IV** Sep 30, 2007 Identified By: NRC Item Type: NCV NonCited Violation

#### Failure to Perform a Written Safety Evaluation for a Change to the Facility

The inspectors identified a non-cited violation of 10 CFR 50.59 for removing the approved seismic qualification methodology (WCAP-8110, supplement 9) from the Updated Final Safety Analysis Report (UFSAR) without performing a written safety evaluation. This issue is in the licensee's corrective action program as PIP M-07-5016. The failure to perform a written safety evaluation for changes made to the facility as described in the UFSAR is more than minor because there was a reasonable likelihood that the change requiring a 10 CFR 50.59 written safety evaluation would require Commission review and approval prior to implementation in accordance with 10 CFR 50.59 (c)(2). This likelihood is based on the November 21, 1974, NRC Safety Evaluation Report for WCAP-8110 Supplement 9, which stated the WCAP is considered an accepted methodology to demonstrate the continued adequacy of ice retention characteristics of the ice baskets when used as a reference for license applications. Removal of this approved methodology from the licensing basis would constitute a change in methodology and would require NRC review and approval. This issue was treated as traditional enforcement because it had the potential for impacting the NRC's ability to perform its regulatory function. It was characterized as a severity level IV violation because it was evaluated as not having greater than very low safety significance. (Section 1R15) 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 <u>cover letters</u> to security inspection reports may be viewed.

## Miscellaneous

Significance: SL-IV Dec 31, 2007
Identified By: NRC
Item Type: VIO Violation
Failure to Follow Procedure During Residual Heat Removal Pump 1B Performance Test
(Closed) URI 05000369/2006007-04, Failure to Follow Procedure During Residual Heat Removal (ND) Pump 1B
Performance Test (PT). As described in NRC Inspection Report 05000369,370/2006007, this concerned a failure to

follow procedures during performance of a TS required PT for ND pump 1B. Specifically, steps in completed procedure PT/1/A/4204/001B were signed by an individual that was not qualified to sign the steps, the individual signed steps as completed that were not performed, and the individual designated a non-conditional step as being not applicable (N/A).

On January 30, 2007, the NRC Office of Investigations (OI) completed an investigation pertaining to URI 05000369/2006007-04. Based on a review of the OI investigation, the NRC determined that a violation of NRC requirements occurred. The Severity Level IV violation was cited in an OI letter dated July 17, 2007 (NOTICE OF VIOLATION, EA-07-130). For administrative purposes this violation (VIO) is designated as VIO 05000369/ 2007005-05, Failure to Follow Procedure During Residual Heat Removal Pump 1B Performance Test.

The inspectors have reviewed the licensee's August 16, 2007, response to the Notice of Violation and subsequent corrective actions. Because the results of PT/1/A/4204/001B were not affected by the procedural non-compliance and appropriate corrective actions have been taken, URI 05000369/2006007-04 and VIO 05000369/2007005-05 are closed.

Inspection Report# : 2007005 (pdf)

**Significance: SL-IV** Sep 30, 2007 Identified By: NRC Item Type: NCV NonCited Violation

#### Failure to Promptly Correct a Condition Adverse toQuality

The inspectors identified a non-cited violation of 10 CFR 72.172 for failing to promptly identify and correct a condition adverse to quality associated with not performing 10 CFR 72.48(c) evaluations on five previous revisions of 10 CFR 72.212 written evaluations for the Independent Spent Fuel Storage Installation (ISFSI). This issue is in the licensee's corrective action program as PIP M-07-4321. This issue is greater than minor because the failure to promptly correct and perform 10 CFR 72.48(c) evaluations on any changes to 10 CFR 72.212 written evaluations had a reasonable likelihood that the changes could require NRC review and approval. This issue was considered as traditional enforcement because it had the potential for impacting the NRC's ability to perform its regulatory function. It was characterized as a severity level IV violation because it was evaluated as not having greater than very low safety significance. This finding has a cross-cutting aspect of timely correct action in the area of problem identification and resolution [P.1.d]. (Section 40A5) Inspection Report# : 2007004 (pdf)

Last modified : August 29, 2008