

McGuire 2

3Q/2007 Plant Inspection Findings

Initiating Events

Significance:  Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to identify and evaluate multiple boric acid leaks.

Green. The inspectors identified a non-cited violation (NCV) of 10CFR50, Appendix B, Criterion V, Instructions, Procedures and Drawings. Licensee activities affecting quality were not accomplished in accordance with site procedures, in that, the licensee failed to adequately evaluate multiple boric acid leaks on safety related components. These site procedures required plant personnel to identify, document, and evaluate all evidence of boric acid leakage. The licensee immediately entered the improperly evaluated leaks into their corrective action system, and completed an initial operability review.

This finding is greater than minor because if the failure to properly evaluate boric acid leaks continued, then unidentified / unevaluated degradation of the reactor coolant pressure boundary or other, susceptible, safety related components could continue and lead to a more significant safety concern. This finding was determined to be of very low safety significance based on the IMC 0609, Appendix A, Phase 1 SDP worksheet. The finding screened as Green because leakage of boric acid is characterized as a Loss of Coolant Accident (LOCA) initiator, but the identified leakage did not contribute to the increased likelihood of a primary or secondary LOCA, and the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. The violation is associated with the Work Practices Component of the Human Performance cross-cutting area in that the licensee did not define and effectively communicate expectations regarding compliance with the boric acid corrosion control program procedures. [H.4.b]

Inspection Report# : [2006005](#) (*pdf*)

Significance:  Oct 06, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to monitor the off-site power system under 10 CFR 50.65 a(1).

An NRC-identified NCV was identified for the licensee's failure to establish goals and monitor the performance of the offsite power system per 10 CFR 50.65a(1). The licensee reclassified the offsite power system (OSP) from a(1) status to a(2) status without having monitored system performance against established goals, or documenting a technical justification to demonstrate that monitoring under a(1) was not required because the system performance was being effectively controlled such that it remained capable of performing its intended function. This finding is in the licensee's corrective action program as Plant Investigation Process (PIP) M-06-3218.

The finding is more than minor because, in accordance with MC 0612, Appendix E, Examples of Minor Issues and Enforcement Manual section 8.1.11, Maintenance Rule a(1) and a(2) violations are not minor because they involve structures, systems, and components (SSCs) that have demonstrated some degraded performance or condition. The finding is of very low safety significance because there was no design deficiency, the finding did not represent an actual loss of a safety function, nor does this involve a risk significant system for mitigating fire, flood, seismic, or severe weather events.

Inspection Report# : [2006004](#) (*pdf*)

Mitigating Systems

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)

Significance: TBD Sep 04, 2007

Identified By: Licensee

Item Type: AV Apparent Violation

Failure to Take Adequate Corrective Action For A Nonconformance Associated With ECCS Throttle Valves

The inspectors identified an apparent violation of 10 CFR 50, Appendix B, Criterion XVI, Corrective Action, for the failure to take adequate corrective action for a nonconformance, identified in Problem Investigation Process (PIP) M-96-0530, associated with potential clogging of the Emergency Core Cooling System (ECCS) cold leg injection throttle valves during high pressure recirculation. Specifically, the licensee failed to adequately implement PIP credited inspections of the inside of the ECCS sump, as evidenced by the 2006 discovery of a significant amount of aged yellow duct tape inside the Unit 2 ECCS sump around the suction and guard pipe of both ECCS trains. In addition, the licensee failed to identify and take actions to process a design change per their design control program for the resolution discussed in PIP M-96-0530, to evaluate the resolution/change under 10 CFR 50.59, and to process a licensing basis change under 10 CFR 50.71(e) to revise the UFSAR.

This finding is greater than minor because, if left uncorrected, the tape could have a detrimental affect on the availability and reliability of both trains of high and intermediate head ECCS pump when called upon during an accident. In particular, the tape 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 as small as 0.1 inches wide in the radial dimension. The issue was evaluated under IMC 0609, Significance Determination Process, Phase II, and was determined to be a greater than green finding. A Phase III risk assessment was performed by a Region II Senior Reactor Analyst who also found the issue to be potentially greater than green. This finding is being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. This finding has a cross-cutting aspect of appropriate correct actions in the area of problem identification and resolution (P.1.d). (Section 40A5)

Inspection Report# : [2007008](#) (pdf)

Significance:  Feb 09, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Take Appropriate Corrective Actions for Valve Positioners not Analyzed for Seismic Requirements

The NRC identified a Green non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion XVI, Corrective Action. Specifically, the licensee failed to take adequate corrective actions in response to a Green NCV issued for nonconformance with respect to the seismic qualification of positioners on the RN to KC Heat Exchanger flow control valves. This finding is of very low safety significance because the design/qualification deficiency did not result in a loss of function per Regulatory Issue Summary (RIS) 2005-020. The licensee determined that adequate loads existed to prevent damage to both RN pumps if the corresponding flow control valves failed to close. In addition, the RN pump vendor provided documentation to the licensee which indicated that the RN pumps could satisfactorily operate at flow rates below the minimum flow value of 2700 gpm for up to two hours without sustaining damage. This was considered adequate time to detect and respond to the problem. This finding has a cross cutting aspect of timely corrective actions in the area of problem identification and resolution. [P.1.d] (Section 40A2a.(3))

Inspection Report# : [2007006](#) (*pdf*)

Significance: SL-IV Oct 06, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to adequately correct UFSAR deficiencies for the SSF.

A non-cited violation (NCV) was identified for failing to take adequate corrective action for the last Updated Final Safety Analysis Report (UFSAR) which did not include all the important information for the standby shutdown facility (SSF), the subject of two previous NCVs. The UFSAR did not include that the turbine-driven auxiliary feedwater (TDAFW) pump suction condenser circulating water makeup source was isolated by two dc power-operated valves which open automatically on low pump suction pressure, even though it was important information to demonstrate required system power source and suction supply diversity. This finding is in the licensee's corrective action program as Plant Investigation Process (PIP) M-06-3240.

This finding is more than minor because it had the potential for impacting the NRC's ability to perform its regulatory function and had a material impact on licensed activities. The inadequate UFSAR information had been used in a 10 CFR 50.59 screening that resulted in not performing a safety evaluation when required, to determine whether prior NRC approval was needed. This issue was considered as traditional enforcement and was characterized as a Severity Level IV. The failure to adequately update the UFSAR for the SSF was the subject of two previous violations (NCVs 05000369,370/2004003-02, and NCV 05000369,370/2005004-01 for untimely corrective action). The cause of the finding is related to the cross-cutting area of Problem Identification and Resolution because the licensee failed to thoroughly evaluate similar problems such that the extent of condition was considered and the cause resolved to prevent recurrence. [P.1.c]

Inspection Report# : [2006004](#) (*pdf*)

Significance: SL-IV Oct 06, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to adequately update the UFSAR for station blackout.

An NRC-identified NCV was identified for failure to adequately update the Updated Final Safety Analysis Report (UFSAR) for the station blackout rule (10 CFR 50.63) implementation. Some station blackout (SBO) mitigating equipment described in the submitted information and analysis have been changed, and because they were not contained in the UFSAR, were not evaluated under 10 CFR 50.59 for their effect on station blackout mitigation, to determine whether prior NRC approval was needed. This finding is in the licensee's corrective action program as Plant Investigation Process (PIP) M-06-3244.

The finding is more than minor because it had a material impact on licensed activities. The missing UFSAR information identified the systems and methodology used to combat a station blackout as described in the station blackout rule. This issue was considered as traditional enforcement because it had the potential for impacting the NRC's ability to perform its regulatory function. This issue was considered to meet the criteria for a severity level IV violation. The cause of the finding is related to the cross-cutting area of Problem Identification and Resolution because the licensee failed to thoroughly evaluate similar problems such that the extent of condition was considered and the cause resolved to prevent recurrence. [P.1.c]

Inspection Report# : [2006004](#) (*pdf*)

Barrier Integrity

Significance:  Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to implement adequate design and test control for ice condenser lower inlet doors.

Green. The inspectors identified a Green non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, Design Control, and Criterion XVI; Test Control, for the licensee's failure to have design documentation to support the ice condenser lower inlet door surveillance procedure test acceptance limits. The licensee subsequently received the

supporting information from the vendor and incorporated it into the UFSAR, Technical Specifications and surveillance procedures.

The inspectors determined that the licensee's failure to have design documentation that supported the acceptance criteria contained in the T.S. surveillance procedures used to test the ice condenser's lower inlet doors at the 40-degree open position was a performance deficiency. The requirement to maintain design bases documentation for tests performed on safety-related SSC's is contained in 10CFR50, Appendix B, Criterion III. The requirement to implement a test program that incorporates the design basis for these components is contained in 10CFR50, Appendix B, Criterion XI. The issue was determined to be more than minor because an excessively high closing torque could adversely impact the ability of the lower inlet door to modulate properly in the event of a small-break LOCA; however, with no lower limit defined in the surveillance test's acceptance criteria, this condition might not have been identified and corrected prior to returning the unit to power operation. The finding is associated with the Barrier Integrity cornerstone and affected the integrity of the reactor containment structure; i.e., the ice condenser's ability to control internal pressure following a LOCA event, and protect the public from radio-nuclide releases. The cause of this issue is related to the cross-cutting area of Human Performance- Resources, because the licensee failed to maintain complete, accurate, and up-to-date design documentation and procedures. [H.2.c]

Inspection Report# : [2006005](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Significance:  Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to conduct adequate QA activities to ensure waste shipments are characterized in accordance with 10 CFR 61.55.

Green. The inspectors identified a non-cited violation (NCV) of 10 CFR 20 Appendix G, Section III.A.3 for failure to conduct adequate Quality Assurance (QA) activities to ensure compliance with the waste characterization requirements of 10 CFR 61.55. The NCV included three examples: the failure to analyze for required plutonium isotopes in a primary filter waste stream sample analyzed on April 15, 2005; the failure to account for differences between licensee and vendor analyses of Cerium-144 in a spent fuel pool cooling (KF) filter waste stream sample collected February 25, 2004; and the failure to account for differences between licensee and vendor analysis results for Cesium-137 in a chemical and volume control (NV) filter waste stream sample dated February 25, 2004. The failure to identify missing or anomalous isotope values could have resulted in the potential shipment of improperly characterized radioactive waste to a licensed burial site or waste processor.

These examples are more than minor because they adversely affect the program and process attributes of the Public Radiation Safety cornerstone, in that they involve an occurrence in the licensee's radioactive material transportation program that is contrary to NRC regulations. The finding was determined to be of very low safety significance because none of the reviewed waste stream data had been used to characterize waste that had been shipped to an offsite licensed burial or processing facility.

Inspection Report# : [2006005](#) (*pdf*)

Significance:  Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to train HAZMAT employees.

An NCV of 10 CFR 71.5 and 49 CFR 172.704(a) was identified for failure to provide required training to hazardous material (Hazmat) employees involved in the preparation and loading of packages containing radioactive material for public transport. Specifically, inspectors identified that two individuals involved in the preparation and closure of a Department of Transportation (DOT) Type A Specification Package on September 6, 2005 had not received the required Hazmat training.

This violation is more than minor because it adversely affects the program and process attributes of the Public Radiation Safety cornerstone, in that it involves an occurrence in the licensee's radioactive material transportation program that is contrary to NRC regulations. The violation was determined to be of very low safety significance because the shipment in question did not result in a breach of package or loss of licensed material during transport.

Inspection Report# : [2006005](#) (*pdf*)

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

Significance: SL-IV Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Promptly Correct a Condition Adverse to Quality

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*)

Significance: N/A Feb 09, 2007

Identified By: NRC

Item Type: FIN Finding

McGuire PI&R

The team concluded that, in general, problems were properly identified, evaluated, and corrected. The licensee was effective at identifying problems and entering them into the corrective action program (CAP) for resolution. The team observed several minor plant material condition deficiencies during plant system walkdowns that had gone undetected by licensee personnel. The licensee maintained a low threshold for identifying problems as evidenced by the large number of Problem Investigation Process reports (PIPs) entered annually into the CAP. Generally, the licensee properly prioritized and evaluated issues. For some lower significance issues, investigations lacked thoroughness or the documentation was not sufficient to substantiate conclusions. Formal root cause evaluations for significant problems were thorough and detailed. Corrective actions specified for problems were generally adequate, although some corrective actions were not complete or comprehensive. Audits and self-assessments were effective in identifying deficiencies and areas for improvement in the CAP, and in most cases, corrective actions were developed

to address these issues. Operating experience usage was found to be effective and well integrated into the licensee's processes for performing and managing work, and plant operations. Personnel at the site felt free to raise safety concerns to management and use the CAP to resolve.

Inspection Report# : [2007006](#) (*pdf*)

Significance: SL-IV Oct 06, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to perform 72.48 evaluations for 72.212 changes.

An NRC-identified non-cited violation of 10 CFR 72.212 was identified for failing to evaluate changes to the written evaluations required by 72.212(b)(2) using the requirements of 72.48(c). Even though licensee procedure NSD 211, 10 CFR 72.48 Process, required that one be performed, the licensee had not performed any 72.48(c) evaluations for any changes to the 72.212(b)(2) written evaluations for the NAC-UMS casks or the TN-32 casks since the requirement was included in the rule (5 revisions). This finding is in the licensee's corrective action program as Plant Investigation Process (PIP) M-06-3729.

This issue is greater than minor because the failure to perform 72.48(c) evaluations on any changes to 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 and was characterized as a Severity Level IV violation.

Inspection Report# : [2006004](#) (*pdf*)

Last modified : December 07, 2007