

McGuire 1

2Q/2004 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Jun 12, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to update fire strategy plans when a modification removed numerous extinguishers.

The inspectors identified a non-cited violation (NCV) of the operating license condition for fire protection for failing to update fire strategy plans when a modification removed numerous fire extinguishers from plant fire areas that contain safety-related equipment. The non-updated fire strategy plans could decrease the effectiveness of the fire brigade. This finding is greater than minor because it is associated with fire protection equipment availability and degraded the ability to meet the manual suppression Mitigating Systems Cornerstone objective. The finding is of very low safety significance because the areas where the inspectors found extinguishers missing did not have both trains of safe shutdown and the standby shutdown system in the same fire area while utilizing 20 foot separation between trains, hence, the significance of the fire brigade's decreased effectiveness was reduced.

(Section 1R05)

Inspection Report# : [2004004\(pdf\)](#)

Significance:  Jun 12, 2004

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Failure to Adequately Correct Configuration Discrepancies for ECCS Sump Valve.

A non-cited violation of 10 CFR 50 Appendix B, Criterion XVI, Corrective Action was identified for failure to take adequate corrective action to resolve a deviation from the as-designed configuration for the B train containment spray suction isolation valve actuator (INS-1B). The deviation prevented the B train common emergency core cooling system containment sump isolation valve (INI-184B) for the residual heat removal and containment spray systems from opening when manually actuated from the valve's main control board switch. The self-revealing finding was greater than minor because it affected the availability and reliability of the emergency core cooling system recirculation function for the Mitigating System Cornerstone and the containment spray system for the Barrier Integrity Cornerstone. The finding is of very low safety significance because of the short time interval during which both the automatic function and manual backup function were unavailable, and the availability of a redundant train during this short time interval. (Section 1R22)

Inspection Report# : [2004004\(pdf\)](#)

Significance:  Mar 13, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to have pre-fire plans for the Unit 1 and 2 interior and exterior doghouses

The inspectors identified a non-cited violation of the operating license condition for fire protection (2.C.4 for Unit 1, 2.C.7 for Unit 2) for failure to have pre-fire (strategy) plans for the interior and exterior doghouse fire areas as part of the fire fighting procedures. The dog houses contain safety-related main steam piping and main steam isolation valves, steam generator power operated relief valves, main steam safety valves, main feed piping and isolation valves, and auxiliary feedwater piping and isolation valves.

This finding was considered to be more than minor because the manual fire suppression defense-in-depth feature was moderately impacted, which affected the mitigating systems cornerstone objective of protection from external factors including fire. This finding was considered to be of very low safety significance because the dog houses are physically independent (separated by distance and enclosed in 3-hour fire barriers) and either the interior or exterior doghouse can independently provide the necessary safe shutdown functions.

Inspection Report# : [2004003\(pdf\)](#)

Significance:  Mar 13, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Standby Shutdown Facility was Not Independent of Cables in Fire Areas 2 and 14

The inspectors identified a non-cited violation (NCV) of Unit 1 operating license condition 2.C.4 for the licensee's failure to provide a dedicated

shutdown capability [the Standby Shutdown Facility (SSF)] that was independent of cables that were located in Fire Areas 2 and 14.

This finding was of greater than minor significance because it affected the objectives of the mitigating systems cornerstone, in that, it affected the availability and reliability of the SSF to maintain the plant in hot shutdown following a fire in Fire Areas 2 or 14. This finding was of very low significance because the large sizes of Fire Areas 2 and 14 would prevent a credible fire from causing a challenging hot gas layer that could affect all cables in the fire areas; the ignition frequencies for credible fires that could damage the cables that would affect the SSF were sufficiently low; and sufficient fire mitigation and safe shutdown equipment would be available to reduce the risk to very low significance.

Inspection Report# : [2004003\(pdf\)](#)

Significance: SL-IV Mar 13, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to update the UFSAR for fire protection safe shutdown

The inspectors identified a non-cited violation for failure to update the Updated Final Safety Analysis Report (UFSAR) as required by 10 CFR 50.71(e) for inclusion of all aspects of the fire protection program, including the standby shutdown facility (SSF) and fire protection safe shutdown methodology.

This issue is greater than minor because the failure to include descriptive information on fire protection defense-in-depth features in the UFSAR could have an impact on future design or operational changes to the safe shutdown methodology or SSF. However, it is of very low safety significance because use of the un-updated UFSAR did not result in unacceptable changes to the facility or procedures.

Inspection Report# : [2004003\(pdf\)](#)

Significance:  Mar 13, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to have a rated 3-hour barrier around the SSF power system

The inspectors identified a non-cited violation of the operating license condition for fire protection (2.C.4 for Unit 1, 2.C.7 for Unit 2) for failure to have a 3-hour-rated fire barrier that enclosed the SSF power system equipment as described in the McGuire Safety Evaluation Report Supplement 6.

This finding was considered to be more than minor because it is a degradation of the fire protection defense-in-depth feature to protect structures, systems, and components important to safety in order to minimize the affect of fire, which affects the mitigating systems cornerstone objective of protection from external factors including fire. This finding was considered to be of very low safety significance because B safe shutdown train equipment can independently provide the necessary safe shutdown functions and is physically independent of the SSF.

Inspection Report# : [2004003\(pdf\)](#)

Significance:  Feb 13, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Deviation from Design Requirements for Line Slope and Drain Legs for Containment Pressure Transmitter Impulse Lines Was not Identified or Evaluated

The team identified a non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Control requirements. The licensee had failed to identify and evaluate the impact on design of sloping the impulse lines for the containment pressure transmitters downward from the containment towards the transmitters without low point drain legs installed. This configuration was a deviation from the licensee's design requirements, and introduced the potential for water intrusion in the instrument impulse lines during normal operation and accident conditions. In response to this condition, the licensee performed an operability evaluation and entered the finding into their corrective program (Problem Investigation Process (PIP) Report No. M-04-000713). The finding is greater than minor because it affects the design control attribute of the mitigating systems cornerstone objective, in that the formation of a loop seal would have the potential to affect the performance capability of instruments used for automatic initiation of engineered safety features, containment pressure control, and post-accident monitoring. The finding was determined to be of very low safety significance (Green) because it is a design deficiency that will not result in loss of automatic initiation of engineered safety features, containment pressure control, or post-accident monitoring capability (loss of function). (Section 1R21.21. b).

Inspection Report# : [2004002\(pdf\)](#)

Significance:  Dec 13, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to perform an adequate risk assessment for removing from service the auxiliary feedwater isolation valve to the 1D steam generator

A non-cited violation (NCV) was identified by the inspectors for failure to perform an adequate risk assessment as required by 10 CFR 50.65(a)(4) when the 1B motor-driven auxiliary feedwater pump containment isolation valve for the 1D steam generator (1CA42B) was closed to perform maintenance on October 14, 2003 (Section 1R13). This finding was considered to be more than minor because the inadequate risk assessment resulted in the assignment of an incorrect risk action level (color) for this maintenance activity. This finding was considered to be of very low safety significance because had the error not occurred the only additional action required would have been management awareness of the additional risk associated with the activity.

Inspection Report# : [2003005\(pdf\)](#)

G**Significance:** 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\(pdf\)](#)

Barrier Integrity

G**Significance:** Jun 12, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to establish adequate test conditions during surveillance testing of Ice Condenser lower inlet doors, 2 Examples.

The inspectors identified two examples of a non-cited violation of 10 CFR 50, Appendix B, Criterion XI, Test Control for failure to perform adequate surveillance testing on the Ice Condenser lower inlet doors under suitable conditions. The first example involved the failure to control the environmental conditions in the containment during the testing of the lower inlet doors which resulted in obtaining inaccurate data. This finding is more than minor because the failure to establish suitable environmental conditions to obtain accurate door torque data impacts the ability to verify that the lower inlet doors will open at the appropriate limits. Consequently, the mitigating function of the ice condenser to maintain containment integrity in the Barrier Integrity Cornerstone was affected. The finding is considered of very low safety significance because when the plant returned to cold shutdown (one week later) and the licensee conducted a retest under the appropriate accident configuration, all values were found to be within acceptable limits. (Section 1R22)

The second example involved the inappropriate performance of preventative maintenance immediately prior to the lower inlet doors surveillance test which resulted in unacceptable preconditioning. This finding is more than minor because performing preventative maintenance immediately prior to the surveillance test has the potential to mask the as-found condition of the lower inlet doors and results in the inability to verify operability. Consequently, the equipment operability and function objectives of the Barrier Integrity Cornerstone were affected. The finding is of very low safety significance due to the licensee performing an as-found visual inspection of the lower inlet doors at initial cold shutdown and having not found any degraded conditions that would affect lower inlet door operability. (Section 1R22)

Inspection Report# : [2004004\(pdf\)](#)

Emergency Preparedness

Occupational Radiation Safety

G**Significance:** Jun 12, 2004

Identified By: NRC

Item Type: FIN Finding

Failure to implement/use adequate engineering controls to effectively manage the radioactive contamination source term during 1EOC16 steam generator eddy-current testing activities.

The inspectors identified a finding for inadequate implementation of proposed contamination control initiatives for Unit 1 End-of-Cycle 16 refueling outage eddy current test (ECT) activities. The primary control initiative which involved scrubber brushes used to clean particulates from ECT drive and communication cables during their withdrawal from S/G tubes were improperly sized and thus ineffective in minimizing the transfer of radioactive particulate contamination from the S/Gs onto the work platforms. Further, backup contamination control equipment and felt pads were not available until the end of the subject task. The inadequate implementation of the proposed controls resulted in extensive contamination on the S/G platforms resulting in increased general area dose rates. This finding is greater than minor because it adversely affects the source term control attribute of the Occupational Radiation Safety Cornerstone and resulted in the unexpected increase in general area S/G platform dose rates and increased worker

exposure. This finding is of very low safety significance because the licensee's three year rolling average collective dose per unit was less than 135 person rem, and all individual worker exposures were closely monitored by the licensee and were within regulatory limits. (Section 20S2)

Inspection Report# : [2004004\(pdf\)](#)

Significance:  Jun 12, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to establish proper engineering and monitoring controls during 1EOC16 S/G maintenance activities.

An NRC identified example and a self-revealing example of a non-cited violation (NCV) of Technical Specification (TS) 5.4.1(a) were identified for failure to follow approved radiation protection guidance for Unit 1 (U1) steam generator (S/G) maintenance activities.

NRC identified example: The licensee failed to properly configure ventilation equipment and conduct required radiological analyses for initial airborne particulate samples collected. Failure to properly establish the ventilation system equipment contributed to the uncontrolled dispersion of airborne particulate radiological material within the U1 reactor building. Self-revealing example: The failure to monitor for alpha emitting radionuclides in particulate air samples prevented timely and thorough evaluation of potential radiological hazards for occupational workers. These examples are more than minor because they adversely affect the plant equipment and the program and process attributes of the Occupational Radiation Safety cornerstone. The failure to properly establish the ventilation equipment resulted in unnecessary radionuclide intakes by workers and the failure to conduct particulate air sample alpha analyses impacted the thorough and timely evaluation of potential airborne radiological hazards. The examples were determined to be of low safety significance because subsequent analyses did not identify any significant alpha emitter hazards, workers were monitored for exposures from external radiation fields and from internally deposited radionuclides as appropriate, and no individuals exceeded either internal or external exposure limits. (Section 20S1)

Inspection Report# : [2004004\(pdf\)](#)

Public Radiation Safety

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

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