McGuire 2
3Q/2006 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G May 19, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Effect of EDG under-frequency not included in ECCS pump test acceptance criteria
Green. The team identified a non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Control. The licensee did not account for emergency diesel generator underfrequency in test acceptance criterion for ASME Section XI testing of the high head safety injection (NV) pumps 1A and 1B. The licensee entered this issue into the corrective action program and performed an operability assessment which determined that the pumps were operable.
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. This finding is of very low safety significance because although the NV pump acceptance criteria were not conservative with respect to the safety analyses, these analyses had sufficient margin to compensate for the reduced pump performance if operated at the reduced-frequency. (Section 1R21.2.1.5)
Inspection Report# : 2006007*(pdf)*

Significance: G May 19, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Maximum differential pressure for containment sump isolation valves.
Green. The team identified a non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Control. The licensee did not evaluate the impact of leakage past the pressure isolation check valves during low head safety injection (ND) pump operation in minimum flow (for a pump test or during a small break loss of coolant accident (SBLOCA)), in determining the maximum differential pressure (dP) across the containment sump isolation motor operated valves (MOVs). This leakage could potentially increase pressure which may challenge the capability of these MOVs to open following a SBLOCA. The licensee entered this finding into the corrective action program with an action to implement a modification to install ND suction relief valves on both units to address long term operability.

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. This finding was determined to be of very low safety significance because the analysis of additional test data showed that the maximum dP at the containment sump isolation valves was less than the thrust capability of the valve actuators. (Section 1R21.2.1.6)
Inspection Report# : 2006007*(pdf)*

Significance: G May 19, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Valve positioner not analyzed for seismic requirements
Green. The team identified a non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Control. The licensee did not evaluate potential failure of the non-safety related valve positioner in the safety related nuclear service water valves, and the impact of the failure on the capability of the valves to perform their design function following a seismic event. The licensee entered this issue into the corrective action program with actions to pursue a long term engineering resolution.
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. This finding is of very low safety significance (Green) because the design/qualification deficiency would not result in a loss of function. The licensee determined that adequate loads existed to prevent damage to both nuclear service water pumps if the corresponding flow control valves were to fail closed. The nuclear service water pump vendor provided documentation which indicated that the pumps could satisfactorily operate at flow rates below the minimum flow value for up to two hours without sustaining damage, which was considered adequate time to detect and respond to the problem before pump damage occurred. (Section 1R21.2.1.12)
Inspection Report# : 2006007*(pdf)*

Significance: G May 19, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Effect of post-accident elevated temperatures not analyzed for nuclear service water piping inside containment
Green. The team identified a non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Control. The licensee did not perform an analysis or use other means to demonstrate that the non-safety related nuclear service water system piping inside containment, which was credited in emergency procedures for post-accident mitigation, was qualified for the elevated temperatures predicted for a loss of coolant accident or main steam line break inside containment. The licensee entered this issue into the corrective action program with actions to revise the affected procedures and evaluate the affected systems.
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. This finding is of very low safety significance (Green) because the design deficiency did not result in an actual loss of function. The non-safety related portion of the nuclear service water system is designed to isolate on a loss of coolant accident signal. Post-accident realignment of the system would be required in order to create the scenario where the piping could be exposed to the potentially elevated temperatures/pressures. (Section 1R21.2.1.14)
Inspection Report# : 2006007*(pdf)*

Significance: G Mar 31, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Take Adequate Corrective Action for Repetitive Fire Strategy Plan Deficiencies
A non-cited violation was identified for failing to take adequate corrective action to ensure accuracy of all fire strategy plans in response to two previous multiple example NCVs. Permanent combustible storage locations were identified in the auxiliary building 733 elevation electrical penetration rooms for both units which were not identified in the fire strategy plans. The non-updated fire strategy plans affect the effectiveness of the fire brigade.

This finding is more than minor because it affects the mitigating systems cornerstone objectives to ensure capability of features that respond to initiating events and the associated attributes of protection from external factors (including fire) and procedure quality. The finding was of very low safety significance because it only minimally diminished manual suppression effectiveness without affecting the low fire ignition frequency within the compartments or the previously established safe shutdown strategy for a fully developed fire within the applicable compartments. The cause of this finding is related to the cross-cutting element of problem identification and resolution.
Inspection Report# : 2006002*(pdf)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Significance: G Mar 31, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Review Licensee Assessments and Vendor Evaluations for Observed U1/U2 Unit Vent Volume Flow Rate Changes to Assure Representative Sampling
The inspectors identified a Green Non-Cited Violation (NCV) of 10 CFR 20.1302(a) for failure to ensure surveys of particulate radioactive materials in effluents released to unrestricted areas by the unit vents were adequate to demonstrate compliance with dose limits for individual members of the public. Specifically, an evaluation of the effect of changes in the operational unit vent volumetric flow rates determined that isokinetic sampling conditions were not maintained during normal ventilation alignments for Unit 1 or maintenance-related ventilation alignments for Unit 1 and Unit 2. The licensee therefore was not assured that the unit vent particulate measurements obtained using 1/2-EMF-35 were accurate. This issue was initially identified as an Unresolved Item following an onsite inspection in January 2005.

The finding is more than minor because it is associated with the program and process attribute of the Public Radiation Safety Cornerstone and affected the cornerstone objective in that failure to maintain isokinetic sampling conditions for the Unit 1/Unit 2 plant ventilation effluent streams could result in inaccurate measurement and reporting of airborne particulate radionuclides in samples and resultant dose estimates. This finding is of very low safety significance because the licensee had other means by which dose from particulate releases could be assessed and the licensee did not exceed the limits in 10 CFR 50 Appendix I or 10 CFR 20.1301(d).
Inspection Report# : 2006002*(pdf)*

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

Last modified : December 21, 2006