McGuire 2
4Q/2005 Plant Inspection Findings

Initiating Events

Significance: G Mar 31, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Comply With RCS Leakage Detection TS for Containment Radiation Gaseous Monitors
A non-cited violation of Technical Specification (TS) 3.4.15, Reactor Coolant System (RCS) Leakage Detection Instrumentation, was identified by the inspectors for failing to take actions required for containment radiation gaseous monitors being inoperable. Specifically, the monitors were unable to detect a 1 gpm RCS leak in 1 hour due to current activity concentrations (i.e., < 0.1 percent failed fuel) and TS required Actions B.1 (24-hour containment atmosphere sample) or B.2 (24-hour RCS water inventory balance) were not performed. The finding is greater than minor because the containment particulate and gas channel radiation monitors were not capable of performing the design bases function of alerting control room operators of elevated reactor coolant system unidentified leakage, for an extended period of time. This inoperability resulted in a potential impact on reactor safety and adversely affected the availability and reliability of the barrier integrity equipment performance attribute of the initiating events cornerstone. The finding was of very low safety significance because other methods of reactor coolant system leak detection were available to the licensee and no actual leakage above 1 gpm was indicated through the reactor coolant system water balance surveillance. This issue contained elements of problem identification and resolution, as well as human performance, in that licensee operations and engineering personnel determined the radiation monitors to be operable without consideration of all available information. (Section 1R15)
Inspection Report# : 2005002*(pdf)*

Significance: G Mar 31, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Have Adequate Surveillance Procedures for RCS Leakage Detection Instrumentation
A non-cited violation of TS 5.4.1.a was identified by the inspectors for failing to establish, implement, and maintain adequate Reactor Coolant System Leakage Detection Instrumentation surveillance procedures for surveillance requirement (SR) 3.4.15.2, channel operational test of containment atmosphere radioactivity monitor; SR 3.4.15.3, channel calibration of containment floor and equipment sump (F&ES) level monitoring system; SR 3.4.15.4, channel calibration of containment atmosphere radioactivity monitor; and SR 3.4.15.5, channel calibration of containment ventilation condensate drain tank (VCDT) level monitor. Procedures for containment radiation particulate and gas monitors had not set the alarms to leakage values equivalent to 1 gallon per minute in 1 hour and had not tested the end device used by the operators to provide alarm indication of potentially excessive reactor coolant system unidentified leakage for multiple containment leakage monitors, including level indication (F&ES and VCDT) and radiation monitors. The finding was greater than minor because the surveillance procedures had not provided assurance that the necessary quality of systems or components were maintained. Consequently, this resulted in a potential impact on reactor safety and adversely affected the availability and reliability of the barrier integrity equipment performance attribute of the initiating events cornerstone. The finding was of very low safety significance because excessive leakage had not existed based on reactor coolant inventory water balances and that the alarm indication functioned properly when tested. This issue contained elements of problem identification and resolution, in that the licensee's operability determination failed to adequately evaluate whether surveillance requirements had been met and actions to determine the "time to alarm" given current RCS activity levels were not prompt. (Section 1R22b.(1))
Inspection Report# : 2005002*(pdf)*

Mitigating Systems

Significance: G Sep 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Take Timely Correction to Update the USFAR for the SSF
A non-cited violation was identified by the inspectors for untimely corrective action to update the Updated Final Safety Evaluation Report (UFSAR) related to the Standby Shutdown Facility (SSF). This issue was originally identified on February 17, 2004, and as of August 3, 2005, no corrective action had been taken to include the SSF in the UFSAR either by revision or approved change package for the next revision, and the corrective action item was closed. The issue was determined to be a severity level IV violation in NRC Inspection Report 05000369,370/2004003. The untimely corrective action was considered for being a cited violation in accordance with section VI.A.1 of the NRC Enforcement Policy. However, because the licensee completed and approved a UFSAR change package and adequately determined the

cause of the untimely corrective action prior to the end of the inspection period, no additional information would be gained from the licensee providing a written response. This finding involved the crosscutting aspect of Problem Identification and Resolution. (Section 4OA2b.(1))
Inspection Report# : 2005004*(pdf)*

Significance: G Jun 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Have Adequate Procedures to Implement Fire Mitigation Actions For Containment
A non-cited violation of Technical Specification (TS) 5.4.1.a was identified by the inspectors for failure to establish, implement, and maintain an adequate abnormal procedure for combating plant fires in the reactor containment building. The procedure was not consistent with the plant design documents regarding which safe shutdown equipment is credited as the assured shutdown train.

This finding is greater than minor because if left uncorrected, the failure to maintain abnormal and emergency procedures consistent with the design basis, could become a more significant safety concern. Additionally, it impacts the Reactor Safety Cornerstone of Mitigating Systems to ensure the availability, reliability, and capability of systems to respond to an event. This finding was determined to be of very low safety significance because the way the procedure is currently written, the operators could still achieve and maintain hot standby. This issue contained elements of problem identification and resolution, as it involved failures to properly identify and correct deficiencies associated with the fire mitigation strategies. (Section 1R05)
Inspection Report# : 2005003*(pdf)*

Significance: G Jun 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Have Adequate Procedures to Implement SLC Test Requirements for Fire Protection Sprinklers
A non-cited violation of Technical Specification (TS) 5.4.1.d, was identified by the inspectors for failing to establish, implement, and maintain adequate procedures to implement fire protection sprinkler inspection requirements for the reactor building annulus contained in Updated Final Safety Analysis Report (UFSAR) Chapter 16, Selected Licensee Commitments, in that six sprinklers' spray patterns were discovered obstructed.

The finding is greater than minor because the finding is associated with both a degradation in the fire protection defense in depth feature and an increase in the likelihood of an initiating event, in that, in the event of a U2 annulus fire, the cables affected by the obstructed sprinklers include those which could cause all four reactor coolant pumps to trip, consequently causing a reactor trip. The finding was determined to be of very low safety significance due to the low number of ignition sources and the availability of one complete safe shutdown train. This issue contained elements of both problem identification and resolution, as well as human performance. The operators failed to properly identify and correct deficiencies associated with the sprinklers, such as obstructions, as specified by the Selected Licensee Commitments (SLC) requirements. In addition, following the discovery of this finding, several procedural issues were found. (Section 4OA5.2)
Inspection Report# : 2005003*(pdf)*

Significance: G Jun 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
MSIV 2SM-1 Fails to Close
A self revealing, non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Action, was identified for failing to take timely and adequate corrective actions to resolve adverse conditions that resulted in a Unit 2 main steam isolation valve (MSIV) being inoperable.

The finding is considered greater than minor because it had a direct impact on the MSIV to perform its safety function, which is to close during a high energy line break or steam generator tube rupture. The finding affects both the Mitigating Systems and Barrier Integrity cornerstones, in that the failure to close impacts the equipment performance (reliability, availability) attribute and containment isolation (minimization of radiological releases) attribute, respectively. Based on the results of the Phase 3 SDP analysis, the finding is considered of very low safety significance. This issue contained elements of problem identification and resolution, as it involved failures to properly evaluate data and deficiencies associated with the MSIVs; therefore, failing to take prompt corrective action to prevent recurrence of adverse conditions and preclude the valve from becoming inoperable. (Section 4OA5.3)
Inspection Report# : 2005003*(pdf)*

Barrier Integrity

Significance: SL-IV Sep 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation

Failure to Update the UFSAR for CAPRMs
A non-cited violation was identified by the inspectors for failure to update the UFSAR as required by 10 CFR 50.71(e) related to inclusion of the license amendment request safety analysis information pertaining to the use of alternative instrumentation and procedures in place of seismic qualification for the Containment Atmosphere Particulate Monitors (CAPRMs). The issue was greater than minor because the failure to include in the UFSAR the alternative methodology for RCS leakage detection after a seismic event with unqualified CAPRMs, as described in the licensee's safety analysis, was material to the acceptability of the license amendment requests. 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 involved the crosscutting aspect of Problem Identification and Resolution. (Section 4OA2b.(2))
Inspection Report# : 2005004*(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Significance: G Mar 31, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Follow Procedural Guidance for Conducting ISFSI Radiation Surveys
The inspectors identified a non-cited violation of Technical Specification 5.4.1(a) for failure to follow radiation protection procedures used to demonstrate compliance with 10 CFR Parts 20 and 72. Specifically, on August 24, 2004, Independent Spent Fuel Storage Installation (ISFSI) area dose rate surveys were conducted using portable radiation monitoring instrumentation, a RO-20 ion chamber survey meter, which did not cover the lower range of radiation levels expected (i.e., less than 0.05 millirem per hour), for selected boundary trending points. Further, the dose rate values documented (i.e., less than 0.1 mrem/hr) for the subject trending point locations, did not allow verification that the established procedural limits used to demonstrate compliance with 10 CFR Parts 20 and 72 requirements were met. This finding is more than minor in that the failure to accurately monitor and properly evaluate the quarterly dose rate results could prevent identification of unexpected/elevated dose rates associated with ISFSI operations and is associated with the Program and Process attribute of the Occupational Radiation Safety Cornerstone. The finding affects the cornerstone objective to prevent/minimize radiation exposure to personnel. The issue is of very low safety significance because the procedurally established dose rate limits are based on conservative occupancy factors, and results of proper dose rate surveys conducted prior and subsequent to the subject date were within established dose rate limits. (Section 2OS1)
Inspection Report# : 2005002*(pdf)*

Significance: G Mar 31, 2005
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Provide Adequate Breathing Air Capacity for Supplied-Air Respiratory Equipment
A self-revealing non-cited violation of 10 CFR 20.1703(e) was identified for use of inadequate in-service breathing air (VB) system equipment to supply ‘Delta Suit' respiratory protective equipment. Specifically, on March 25, 2004, available VB system capacity was inadequate to supply adequate air flow to six workers using supplied-air ‘Delta Suits' for steam generator (SG) work activities. The finding is more than minor in that it is associated with the Occupational Radiation Safety Cornerstone Plant Equipment and Instrumentation attribute and adversely affects the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radioactive material during routine civilian nuclear reactor operations. The issue is of very low safety significance because the flow monitoring equipment used to identify degraded or failed VB system operations alerted responsible staff. The subject SG workers immediately ceased work activities and exited the work area without any unexpected internal contamination or resultant doses. (Section 2OS3)
Inspection Report# : 2005002*(pdf)*

Public Radiation Safety

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

Last modified : March 03, 2006