

Fermi 2

2Q/2009 Plant Inspection Findings

Initiating Events

Significance:  Sep 30, 2008

Identified By: NRC

Item Type: FIN Finding

Failure to Adequately Control Loose Materials in the Switchyard.

A finding of very low safety significance was identified by the inspectors for the licensee's failure to adequately control loose materials in the 345kV switchyard. Specifically, the inspectors identified a wooden pallet and multiple wooden boards, stanchions, and saw horses inside the switchyard fence. Once this condition was identified, the licensee removed the material from the switchyard. No violation of regulatory requirements occurred.

The finding was greater than minor because, if left uncorrected, it would become a more significant safety concern. Specifically, the loose items could affect the proper operation of the switchyard during periods of high winds. This finding was determined to be of very low safety significance because the finding was not a loss-of-coolant accident initiator, did not increase the likelihood of a fire or a flood, and did not contribute to the likelihood that mitigating equipment relied upon during a loss of Division II offsite power sources would not be available. The inspectors determined that the failure to ensure supervisory and management oversight of work activities also affected the cross-cutting area of Human Performance, Work Practices (H.4.c).

Inspection Report# : [2008004](#) (*pdf*)

Mitigating Systems

Significance:  Jun 30, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Adequately Dedicate a Commercial Grade Item for Safety-Related Use

A Green self-revealing finding of very low safety significance and associated NCV of 10 CFR 50, Appendix B, Criterion VII, "Control of Purchased Material, Equipment, and Services," was identified for the failure to adequately dedicate a commercial grade item for use in a safety-related application. The vendor supplied a mismatched stem and locknut in a valve rebuild kit which was procured as a commercial grade item and dedicated by the licensee for use in a safety-related application. The valve later failed when the locknut fell off the stem which caused the system to be inoperable.

The finding was determined to be more than minor because the finding was associated with the design control attribute and affected the Mitigating Systems Cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low safety significance from a Phase 1 SDP because it only affected the loss of function of one division of non-interruptible air supply system (NIAS) for less than the Technical Specification allowed outage time. There were no cross-cutting aspects associated with this finding since the deficiency was not reflective of current licensee performance.

Inspection Report# : [2009003](#) (*pdf*)

Significance:  Jun 30, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Control Potential Debris Source Term in Primary Containment

The inspectors identified a finding of very low safety significance and associated NCV of 10 CFR 50, Appendix B, Criterion III (Design Control), for the failure to control debris source term inside the drywell. The licensee installed ty wraps inside the drywell as part of a design modification without performing a debris transport and loading analysis of the emergency core cooling system (ECCS) suction strainers in the torus. Once identified, the licensee performed the analysis and replaced the ty-wraps with ones of an acceptable material.

The finding was determined to be more than minor because the failure to control the debris source term inside the primary containment could lead to loss of the ECCS during an accident condition. Specifically the debris could be transported from the drywell to the torus and cause the ECCS strainers to become blocked causing degradation in the ECCS flow during the accident and, therefore, affected the Mitigating Systems Cornerstone. The finding was determined to be of very low safety significance because the engineering analysis determined the ECCS flow rates would remain above the values assumed in the safety analysis and the debris loading did not exceed the structural limits of the strainers. There were no cross-cutting aspects associated with this finding since the deficiency was not reflective of current licensee performance.

Inspection Report# : [2009003](#) (*pdf*)

Significance:  Jun 30, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Completely Disassemble and Remove Scaffold from the Steam Tunnel

The inspectors identified a finding of very low safety significance and associated NCV of 10 CFR 50, Appendix B, Criterion V (Procedures), for the failure to follow procedures. The licensee partially dismantled a scaffold and left the remaining scaffold poles in place which was contrary to the licensee's scaffold procedure. Once identified, the licensee removed the scaffold materials and entered the issue into their corrective action program for resolution.

The finding was determined to be more than minor because if left uncorrected, it would become a more significant safety concern. Specifically, the scaffold components represented potential high energy line break induced missiles which could have damaged components that were required to remain operable to mitigate the event and, therefore, affected the Mitigating Systems Cornerstone. This finding was determined to be of very low safety significance because the phase 3 SDP estimated the change in core damage frequency due to the finding was $3.8E-7$ /yr. This finding had a cross-cutting aspect in the area of human performance, work practices, because the licensee did not utilize human error prevention techniques (H.4(a)), such as self-checking and proper documentation of activities.

Inspection Report# : [2009003](#) (*pdf*)

Significance:  Mar 31, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedural Controls Over Construction of Storage Racks and Storage Areas

A finding of very low safety significance and an associated NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors for the licensee's failure to include criteria in procedures for evaluation of storage areas and storage racks built in the power block. Licensee procedure MOP11, "Combustible Material," placed controls on the storages areas and storage racks to ensure that combustible loading remained acceptable but failed to incorporate adequate guidance for designating the storage area and constructing the racks to ensure nearby safety-related equipment would not be adversely affected during a plant transient or seismic event. After the issue was raised, modifications to the scaffold storage locations were completed, as needed.

The finding was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of design control (plant modifications) and it adversely impacted the cornerstone objectives. As a result of not evaluating the storage areas, safety-related components, systems or structures could have been affected. This finding was

determined to be of very low safety significance because it did not result in loss of operability or functionality. The inspectors determined that the finding had an associated cross-cutting aspect of Problem Identification and Resolution, Corrective Action Program, Corrective Action (P.1 (d)).

Inspection Report# : [2009002](#) (*pdf*)

Significance:  Mar 31, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Core Spray Pump Motor Oil Leak Not Promptly Identified and Corrected

A finding of very low safety significance (Green) and an associated NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was self-revealed for the failure to promptly identify and correct an oil leak that subsequently rendered a safety-related pump inoperable. Maintenance staff discovered an oil leak near a safety related pump and informed Operations staff of the leak but the licensee failed to identify the source of the leak for 5 days and, therefore, failed to take prompt corrective actions. Once identified, the licensee repaired the damaged instrument tube and restored the pump to service.

The finding was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of Equipment Performance and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the oil leak ultimately rendered the pump inoperable. The finding was determined to be of very low safety significance because a Phase 2 SDP determined the risk to be very low. This finding had an associated cross-cutting aspect of Problem Identification and Resolution, Corrective Action Program, Issue Identification (P.1 (a)).

Inspection Report# : [2009002](#) (*pdf*)

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: FIN Finding

Inadequate Heat Exchanger Inspection Frequency

A finding of very low safety significance was identified by the inspectors for the failure to test and/or inspect the safety-related non-interruptible air supply (NIAS) control air compressor (CAC) aftercoolers in accordance with Generic Letter (GL) 89-13 commitments. The licensee inspected the heat exchangers every 10 to 12 years which was not in accordance with their GL 89-13 commitment to frequently inspect them. This finding was entered into the licensee's corrective action program (CAP) as condition assessment and resolution document (CARD) 08-27672. Corrective actions planned included changing the frequency to comply with the licensee's GL 89-13 commitment. No violation of regulatory requirements occurred.

The finding was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of Procedure Quality and affected the cornerstone objective of ensuring the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was of very low safety significance because the finding was confirmed not to result in a loss of operability or functionality. No cross-cutting aspect was assigned because this issue is not indicative of current plant performance.

Inspection Report# : [2008005](#) (*pdf*)

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Control Air Compressor Capacity Test Program

A finding of very low safety significance and an associated NCV of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," was identified by the inspectors for the failure to perform adequate testing for both the Division 1 and 2 CACs. Specifically, the licensee failed to incorporate appropriate acceptance criteria and failed to include appropriate test methodology in the test procedures for the safety-related CACs. Corrective actions planned included revising

and/or re-performing the test procedures as necessary.

The finding was more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of Procedure Quality and affected the cornerstone objective of ensuring the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was of very low safety significance because the finding was confirmed not to result in a loss of operability or functionality. No cross-cutting aspect was assigned because this issue is not indicative of current plant performance.

Inspection Report# : [2008005](#) (*pdf*)

Significance:  Sep 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Install Smoke Detectors in the Reactor Building, First Floor, Beam Pockets.

The inspectors identified an NCV of Condition 2.C.(9) of the Fermi-2 Facility Operating License NPF-43 for the failure to have adequate fire detection installed in the reactor building first floor in accordance with the applicable National Fire Protection Association codes. Specifically, the licensee failed to install detectors in two beam pockets. Once this condition was identified, the licensee implemented additional compensatory measures for the lack of adequate detectors.

The finding was greater than minor because it affected the Mitigating Systems Cornerstone attribute of protection against external factors (fire) and it impacted the objective of the Mitigating Systems Cornerstone. As a result of not having an adequate number of detectors, detection of a fire in the reactor building could have been delayed. This finding was determined to be of very low safety significance based on the availability of safe shutdown equipment and the low number of ignition sources. The inspectors determined that the failure to have adequate detection and compensatory measures also affected the cross-cutting area of Problem Identification and Resolution, CAP, Corrective Action (P.1.d).

Inspection Report# : [2008004](#) (*pdf*)

Significance: SL-IV Sep 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate 10 CFR 50.59 Evaluation for Reactor Building Missile Protection.

The inspectors identified a Green (Severity Level IV) NCV for an inadequate 10 CFR 50.59, “Changes, Tests, and Experiments,” evaluation resulting in failure to receive prior NRC approval for changes in licensed activities associated with protection of safety-related equipment against tornado generated missiles. Specifically, the licensee failed to demonstrate that the proposed change did not result in an increase in the probability of a malfunction of equipment important to safety previously evaluated in the Updated Final Safety Analysis Report (UFSAR). As part of the corrective actions, the licensee installed missile shields and initiated a study to determine the appropriate long-term corrective actions.

The finding was greater than minor because the change had the potential for impacting the NRC’s ability to perform its regulatory function as the inspectors determined the change would have required prior NRC approval. Based on a phase 3 significance determination, the senior risk analyst determined the finding was of very low safety significance because the change in core damage frequency for this finding was calculated to be less than 1.0E-7. This was determined to be a Severity Level IV NCV of 10 CFR 50.59(a)(2)(i) (1989).

Inspection Report# : [2008004](#) (*pdf*)

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 [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : August 31, 2009