Dresden 3
4Q/2008 Plant Inspection Findings

Initiating Events

Significance: G Dec 31, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Freeze Seal Established Prior to Meeting The Requirements of Procedure MA-AA-736-610
A finding of very low safety significance and associated Non Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by NRC inspectors on November 12, 2008, when the licensee had declared a freeze seal established prior to meeting the requirements of procedure MA AA 736 610, "Application of Freeze Seal to All Piping," Revision 3. The licensee took corrective actions that included counseling the first line supervisor and the engineer involved in the work.
The finding was determined to be more than minor because the finding, if left uncorrected, would become a more significant safety concern. Specifically, the inspectors determined that the licensee had determined the freeze seal to be acceptable before it was allowed by procedure. Had there been a problem with the freeze seal, there may not have been adequate time to react and implement any required contingency actions. The inspectors concluded this finding was associated with the Initiating Events Cornerstone. This finding has a cross cutting aspect in the area of Human Performance, H.1.b, because the licensee did not make a conservative assumption in decision making

Inspection Report# : 2008005 *(pdf)*

Significance: G Jun 30, 2008
Identified By: NRC
Item Type: FIN Finding
Failure to Control Loose Materials in the Protected Area
The inspectors identified a finding of very low safety significance with no associated violation of regulatory requirements for the licensee's failure to control loose materials in the protected area. Specifically, on the morning of May 30, 2008, the inspectors identified loose materials that were tornado hazards in direct line of site to the Unit 2 and 3 main transformers and the Unit 3 reserve auxiliary transformer. High winds were forecast for that afternoon. Once notified, the licensee entered the issue into its corrective action program and removed the materials.
The inspectors concluded that the finding was more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," issued on September 20, 2007, because, if left uncorrected, the finding would become a more significant safety concern. The finding is of very low safety significance because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available.

Inspection Report# : 2008003 *(pdf)*

Mitigating Systems

Significance: G Dec 31, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
LPCI Heat Exchangers' Design Calculation Deficiencies and Discrepancies
The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control,"

having very low safety significance involving the low pressure coolant injection (LPCI) heat exchangers cooling capability during a design basis loss of coolant accident (LOCA). Specifically, the licensee failed to evaluate the effects of higher containment pressure post power up-rate on the LPCI heat exchangers' differential pressure set-point calculation. In response to the issue, the licensee implemented compensatory actions including updating various calculations and performing several operability evaluations.
This finding was more than minor because there was reasonable doubt on the operability of the LPCI heat exchangers and if left uncorrected, these heat exchangers had the potential to be inoperable during the summer months. This finding was of very low safety significance because the inspectors determined that the LPCI heat exchangers were in a non-conforming but operable condition and the issue screened as Green using the SDP Phase 1 screening worksheet.

Inspection Report# : 2008005 *(pdf)*

Significance: G Sep 30, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Provide an Adequate Procedure for Several Instrument Maintenance Surveillance Tests
The inspectors identified a NCV of Technical Specification (TS) 5.4.1 for the failure to provide an adequate procedure for the verification of correct installation and restoration of equipment during instrument maintenance surveillance tests in June and August 2008. As part of the corrective actions, the licensee included a task to identify affected instrument surveillance procedures and generate a work down curve for revising the affected procedures.
Using IMC 0612, Appendix E, "Examples of Minor Violations," issued on September 20, 2007, the inspectors determined that there were no similar examples to this finding in Appendix E. The inspectors referenced IMC 0612, Appendix B, "Issue Screening," dated September 20, 2007. The inspectors determined that the finding was more than minor based on Section 3, (2), "If left uncorrected would the finding become a more significant safety concern." The inspectors determined that the failure to perform an independent verification that a testing configuration had been returned to normal could result in the inability of a system or component to perform its function which would be a more significant safety concern. No systems had been incorrectly returned to service as a result of the inadequate procedure and, therefore, this violation had very low safety significance. The inspectors did not identify a cross cutting issue for this finding that was separate from the finding itself for inadequate procedures.
Inspection Report# : 2008004 *(pdf)*

Significance: G Jun 30, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Fire Doors Failed Their Periodic Functional Test
The inspectors identified a finding of very low safety significance that involved a Non-cited Violation of the Dresden Nuclear Power Station Renewed Facility Operating License of the Dresden Nuclear Power Station Renewed Operating License Conditions 2.E and 3.G. Two fire doors failed their periodic functional test to demonstrate that the doors could automatically close and were not declared inoperable and appropriate corrective actions were not taken in a timely manner. The door between auxiliary electric equipment room and the Unit 3 cable tunnel (Door 168) failed its functional test on June 9, 2007, and was not repaired until June 18, 2007. The fire door separating the Isolation condenser make-up pumps (Door 2001) failed its functional test on May 9, 2007, and was not repaired until May 23, 2007. The licensee changed the surveillance test procedure to ensure that the doors would be declared inoperable if the test failed in the future.
The inspectors concluded, using Inspection Manual Chapter (IMC) 0612, Appendix E, "Examples of Minor Violations," issued on September 20, 2007, that this finding was more than minor by reviewing example 5.b, in that the equipment was found in an inoperable condition but was returned to service. The inspectors determined that this issue was of very low safety significance because the doors were in very low traffic areas and the probability of the doors being open if a fire were to occur or that someone would pass through either door during a fire scenario was low. The inspectors determined that this issue affected the cross-cutting area of Human Performance because the licensee failed to provide a complete and accurate surveillance test procedure that reflected actual design and license requirements H.2.(c).

Inspection Report# : 2008003 *(pdf)*

Significance: G Mar 28, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Acceptance Criteria for Stem Factor in MOV Testing Did Not Account for Uncertainty
The inspectors identified an NCV of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," for failure to include an uncertainty value, to account for test equipment accuracy and lubricant degradation, in the acceptance criteria for the stem factor in the diagnostic test of MOV 3-2301-3, "Unit 3 high pressure coolant injection (HPCI) steam admission valve." The stem factor is used to calculate the coefficient of friction (COF) to determine the predicted stroke opening time of the MOV under design basis conditions. Corrective actions for this issue included a re-calculation of the stem factor to account for instrument accuracy and lubricant degradation and an evaluation for guidance to be added to the test procedure.
This finding was more than minor because, if the finding was left uncorrected it would become a more significant safety concern. Specifically, the acceptance criteria specified in the diagnostic test for the stem factor did not assure that MOV 3-2301-3 would meet its design stroke time value to open in less than or equal to 30 seconds. The finding was of very low safety significance based on a Phase 1 screening in accordance with IMC 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," because the finding did not result in an actual loss of a safety function. (Section 4OA2.a)

Inspection Report# : 2008008 *(pdf)*

Significance: G Mar 28, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Develop a Pre-Fire Plan for Fire Zone 18.6
The inspectors identified an NCV for the licensee's failure to develop a pre-fire plan for fire zone 18.6. The finding was a violation of Dresden Nuclear Power Station Renewed Operating License. License conditions 2.E and 3.G for Unit 2 and Unit 3, respectively, of the Dresden Nuclear Power Station Renewed Facility Operating Licenses state, in part, that: "The licensee shall implement and maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report (UFSAR) or the facility...." Pre-fire plans are described in the UFSAR as "provided for all safety-related areas of the plant." Corrective actions by the licensee included the development of a pre-fire plan for fire zone 18.6.

The finding was more than minor because it involved the Mitigating Systems attribute of protection against external factors (i.e. fire), where the failure to develop a pre-fire plan for fire zone 18.6 could have adversely impacted the fire brigade's ability to fight a fire. As such, this finding impacted the Mitigating Systems objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. As discussed by IMC 0609, Appendix A, Attachment 0609.04, issues related to performance of the fire brigade are not included in IMC 0609, Appendix F, "Fire Protection SDP," and require management review. Therefore, the finding was reviewed by NRC management, and was determined to be a finding of very low safety significance (Green) because no safe shutdown equipment was located in this fire zone. The inspectors determined that this issue also affected the cross-cutting area of problem identification and resolution, CAP aspect P.1(c) because the licensee failed to thoroughly evaluate a problem previously identified by NCV 05000237/2006011-01; 05000249/2006011-01, "Licensee's failure to develop a pre-fire plan for fire zone 8.2.6.A, elevation 534'," such that the resolution did not fully address causes and extent of condition. (Section 4OA2.a)

Inspection Report# : 2008008 *(pdf)*

Significance: G Feb 15, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform Periodic Trip Tests on Thermal Overload Heaters.
Green. The inspectors identified a finding of very low safety significance and an associated NCV of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control." Specifically, the licensee failed to identify and periodically perform the

necessary testing on safety-related thermal overload relays/heaters (TOLs), installed in 1993, in the alternate power feed to isolation condenser reactor inlet valves 2-1301-4 (Unit 2) and 3-1301-4 (Unit 3). Periodic testing of the TOLs is required to ensure the valves can perform their Appendix “R” safe shutdown functions, when required. Upon discovery, the licensee entered the issue into its corrective action program, initiated predefine parameters (PMID) and created surveillance work orders to test the TOLs at the next opportunity. There was not a cross-cutting aspect to this violation.

This issue was more than minor in accordance with IMC 0612, Appendix B, "Issue Disposition Screening," because the finding was associated with the “Equipment Performance” attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding was of very low safety significance because the finding did not represent an actual loss of functionality of the isolation condenser system containment isolation valves. (Section1R05.7)

Inspection Report# : 2008006 *(pdf)*

Barrier Integrity

Significance: G Jun 30, 2008
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Verify the Adequacy of Design Information Provided By a Vendor
A self-revealed finding of very low significance was identified involving a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” for the failure to completely verify the adequacy of design information provided by a vendor. The deficiency existed between August 23, 2006 and December 22, 2006. The corrective actions for this finding involved requiring the Exelon Nuclear Fuel division to perform the design analysis reviews for core reloads on the future.
The inspectors concluded that the finding was more than minor in accordance with IMC 0612, “Power Reactor Inspection Reports,” Appendix B, “Issue Screening,” issued on September 20, 2007, because, if left uncorrected, the finding would become a more significant safety concern; the finding is considered to be of very low safety significance because it was based on a design deficiency that was confirmed by the inspectors not to result in loss of operability. The primary cause of this finding was related to the cross-cutting issue of Human Performance, “Work Practices,” because the licensee did not ensure supervisory and management oversight of contractor work activities, such that nuclear safety was supported. (H.4.(c))

Inspection Report# : 2008003 *(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

Significance: N/A Mar 28, 2008
Identified By: NRC
Item Type: FIN Finding
PI&R Inspection Summary
On the basis of the sample selected for review, the team concluded that implementation of the corrective action program (CAP) at Dresden was generally good. The licensee had a low threshold for identifying problems and entering them in the CAP. Items entered into the CAP were screened and prioritized in a timely manner using established criteria; were properly evaluated commensurate with their safety significance; and corrective actions were generally implemented in a timely manner, commensurate with the safety significance. The team noted that the licensee reviewed operating experience for applicability to station activities. Audits and self-assessments were determined to be performed at an appropriate level to identify deficiencies. On the basis of interviews conducted during the inspection, workers at the site expressed freedom to enter safety concerns into the CAP. There were two Green findings identified by the team during the inspection. The first finding involved the failure to have adequate acceptance criteria in the motor-operated valve (MOV) diagnostic test procedure. The second finding related to the failure to develop a pre-fire plan for a zone that contained safety related equipment. The second finding had a cross-cutting aspect in the area of Problem Identification and Resolution.
Inspection Report# : 2008008 *(pdf)*

Last modified : April 07, 2009