Dresden 2
4Q/2005 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Sep 28, 2005
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Unable to Remotely Trip the 2B Service Water Pump from Control Room from Safety Related 4160 Volts bus 24
A self-revealing finding involving a non-cited violation of Technical Specification 5.4, "Procedures," was identified on April 15, 2005, when control room operators were unable to remotely trip the 2B service water pump from the control room. The inability to trip the pump from safety related 4160 Volt bus 24 was due to the performance of poor maintenance on the pump's breaker and inadequate post-maintenance testing. The inability to trip the breaker had the potential to render all other loads on bus 24 inoperable, including one division of the containment cooling service water system, or add an additional unanalyzed load on the emergency diesel generator.

The finding was greater than minor because, if left uncorrected, it could become a more significant safety concern because inadequately performed breaker maintenance could render additional safety-related systems inoperable. The finding impacted the Mitigating Systems cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events. As a result of this event, the licensee replaced the trip coil, verified the installation of all the applicable trip coils on both units, revised the work order instructions, and evaluated post maintenance testing of 4 KV breakers. The finding was of very low safety significance because the other division of the containment cooling service water system was available and the licensee was able to trip the breaker locally at the bus. This finding was related to the cross-cutting issue of human performance because electricians failed to properly reinstall the trip coil for the 2B service water pump breaker per the work instructions and the work instructions failed to specify an adequate post maintenance test.
Inspection Report# : 2005010*(pdf)*

Significance: G Aug 12, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Technical Specification Requirements for Position Verification Not Met
The inspectors identified a Non-Cited Violation of Technical Specification Surveillance Requirement 3.7.2.1 regarding the failure to periodically verify the position of manual valves. Specifically, the licensee did not verify the correct position of 11 manual valves that were not locked, sealed, or otherwise secured in position in the diesel generator cooling water (DGCW) subsystem flow path associated with the DGCW pump motor coolers. The licensee's corrective actions included verifying and then locking the affected valves in the open position and revising operating procedures to reflect that the affected valves are locked in the open position.

This finding was more than minor because it was associated with the mitigating systems attribute of configuration control, which affected the mitigating systems cornerstone objective of ensuring the availability and reliability of the DGCW system to respond to initiating events to prevent undesirable consequences. The finding was of very low safety significance based on the licensee verifying the valves were in their correct position and screened as Green using the SDP Phase 1 screening worksheet.
Inspection Report# : 2005009*(pdf)*

Significance: G Aug 12, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Unanalyzed Diesel Loading Sequence in Operating Procedures
The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," due to the design basis emergency diesel generator (EDG) loading sequence during a loss of coolant accident/loss of offsite power not being correctly translated into procedures or instructions. Specifically, the loss of power procedure provided guidance to operate the plant outside the analyzed EDG loading sequence. The licensee's corrective actions included evaluating the effect of the procedure's unanalyzed load sequence and concluded that the EDG would have been capable of performing its safety function.

This finding was more than minor because it was associated with the attribute of procedure quality, which could have affected the mitigating systems cornerstone objective of ensuring the availability and reliability of the EDGs to respond to initiating events to prevent undesirable

consequences. The finding was of very low safety significance based on the results of the licensee's analysis and screened as Green using the SDP Phase 1 screening worksheet.
Inspection Report# : 2005009*(pdf)*

Significance: G Jul 25, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Lack of Prioritization for Performing TS 3.4.3.1 Surveillance Testing and Valve Inspections for Target Rock Valves and Corrective Action Assignments for the 4G Valve
A finding involving a non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Actions," was identified by the inspectors on July 25, 2005, for the licensee's lack of timely actions to promptly identify and correct out-of-tolerance lift setpoints for the main steam safety valves and the main steam safety/relief valves (Target Rock valves). The licensee's actions lacked prioritization in performing Technical Specification required surveillance testing on the Unit 2 and Unit 3 Target Rock safety/relief valves, in determining the cause of the surveillance test failures on the Target Rock valves, and in not assigning corrective actions to determine the cause of the 4G safety valve Technical Specification surveillance test failure. The licensee's lack of timely actions resulted in the delayed issuance of a Licensee Event Report following the discovery of degradation of the Unit 2 Target Rock valve during disassembly of the valve.

The finding was greater than minor because, if left uncorrected, the lack of prioritization of the licensee's actions could lead to the valves not meeting the safety function of preventing over-pressurization of the reactor coolant system. The finding could also lead to the licensee unknowingly operating the units with inoperable safety-related equipment. The finding impacted the Mitigating System cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events. The finding was of very low safety significance because the ability of the main steam Target Rock safety/relief valves and the 4G main steam safety valve to function to prevent over-pressurization of the reactor coolant system was not invalidated by the inability of the valves to lift at the prescribed setpoint. In addressing this issue, the licensee discontinued in-plant Technical Specification testing after obtaining approval from the NRC, submitted an analysis to the NRC for determining that the drift condition of the valves was still bounded by the analysis for over-pressurization events, and installed refurbished valves in December 2004. This finding was related to the cross-cutting issue of problem identification and resolution because the licensee's actions were untimely and unfocused.
Inspection Report# : 2005010*(pdf)*

Significance: G Apr 01, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Safe Shutdown Procedure Failed to Specify Correct Number of Turns for Opening Valve
Green. A finding of very low safety significance was identified by the inspectors for a violation of 10 CFR Part 50, Appendix B requirements. The licensee failed to specify the correct number of turns in a hot shutdown procedure for partially opening a valve relied upon to mitigate a fire. The incorrect number of turns specified in the procedure could have caused a significant delay in performance of safe shutdown actions in the event of a fire. Once identified, the licensee entered the finding into their corrective action program to revise the affected procedures.

This finding was more than minor because the procedural error could have caused a significant delay in the performance of safe shutdown actions in the event of a fire. The issue was of very low safety significance because the licensee's analysis showed that sufficient margin remained for the performance of the safe shutdown actions. The finding was a Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, which required procedures affecting quality to be of a type appropriate to the circumstances. (Section 1R05.5b)

Inspection Report# : 2005002*(pdf)*

Significance: G Mar 03, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Corrective Actions for a Significant Condition Adverse to Quality Involving the Failure of the Unit 2 Emergency Diesel Generator Air Start Regulator
On March 3, 2005, a performance deficiency involving a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, was identified by the inspectors. The licensee had implemented inadequate corrective actions for a significant condition adverse to quality that occurred on January 19, 2001; and no corrective actions were assigned to prevent recurrence of a significant condition adverse to quality that occurred on November 29, 2004. Both events involved the failure of the Unit 2 emergency diesel generator air start regulating valve due to corrosion build up on the valve stem. The primary cause of this finding was related to the cross-cutting issue of Problem Identification and Resolution.

The finding was greater than minor because it impacted the Mitigating System Cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events and because it affected the reliability of a safety related component. After the inspectors questioned the lack of corrective actions for the November 29, 2004 event, the licensee created an action item to review the cause of the event and create corrective actions. In addition, the licensee wrote IR [Issue Report] 308526, "IR 277466 Significance Not Properly Identified." The purpose of this IR was to identify why this event was not entered into the corrective action system. This review had not been completed by the end of the inspection period. The finding was of very low safety significance because the emergency diesel generator started upon demand. (Section 1R19)

Inspection Report# : 2005003*(pdf)*

Significance: W Jan 30, 2004
Identified By: NRC
Item Type: AV Apparent Violation
Failure to properly evaluate extended power uprate for its impact on post scram reactor vessel water level to prevent water intrusion into HPCI steam supply line
An apparent violation (AV) of 10 CFR 50, Appendix B, Criterion III, Design Control, having a preliminary low to moderate safety significance (White) was identified as a result of the inspectors' review of a January 30, 2004, scram event. Water intrusion into the high pressure coolant injection (HPCI) system turbine steam supply line occurred as a result of the scram and rendered the HPCI system inoperable. The inspectors determined that the licensee implemented extended power uprates on Unit 2 in 2001 and Unit 3 in 2002, but failed to verify the adequacy of design for the implementation of extended power uprate to respond to changes in post-scram reactor vessel water level to prevent water intrusion into the HPCI steam supply line.

The finding was determined to be greater than minor because it impacted the mitigating systems cornerstone. The finding was preliminarily determined to be of low to moderate safety significance following the performance of a case-specific Phase 3 SDP evaluation. Corrective actions taken by the licensee included modifying the feedwater level control system post-scram level setpoints and dynamic modeling of the reactor vessel level response.
Inspection Report# : 2005014*(pdf)*

Barrier Integrity

Significance: G May 02, 2005
Identified By: NRC
Item Type: FIN Finding
Removal of the 2D Traversing Incore Probe (TIP) Drawer With Clearance Order Danger Tag Attached
On May 2, 2005, a performance deficiency was identified by the inspectors. The licensee failed to identify that corrective actions were ineffective from a previous 2004 event, involving the failure to follow the clearance order process. Also, an instrument maintenance technician failed to properly implement annual clearance order process training. As a result, the instrument maintenance technician removed the 2D traversing incore probe (TIP) drawer which had a clearance order danger tag attached to the control switch. The primary cause of this finding was related to the cross-cutting issues of human performance and problem identification and resolution.

The finding was more than minor because, if left uncorrected, the licensee's failure to ensure plant personnel adherence to the clearance order process would become a more significant safety concern by resulting in significant personnel safety consequences, and because it impacted the barrier integrity cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. The removal and re-installation of the 2D traversing incore probe drawer did not adversely affect the ability to ensure containment isolation using the ball check containment isolation valve. The licensee briefed all maintenance personnel on this event and added more detailed discussion on the clearance order process to the annual site training. Therefore, this finding screened as having very low safety significance.
Inspection Report# : 2005008*(pdf)*

Significance: G Feb 08, 2005
Identified By: NRC
Item Type: FIN Finding
Failure of the Refuel Floor Damper & Design Deficiency with the Standby Gas Treatment System
On February 8, 2005, a performance deficiency was identified by the inspectors. The licensee failed to identify the failure of the refuel floor damper in the reactor building ventilation system in a timely manner which resulted in the late discovery of a design deficiency with the standby gas treatment system. The standby gas treatment system used reactor building ventilation ductwork before directing air flow to the standby gas treatment filters. The refuel floor damper would throttle down, per design, to ensure a local negative differential pressure in the reactor water cleanup heat exchanger rooms with respect to the refuel floor. As a result, air flow to the standby gas treatment system was significantly restricted and affected the standby gas treatment recovery time for the entire secondary containment. The damper failed prior to 2003, masking the design deficiency, and was unnoticed until February 2005. Also, inadequate inspections of the dampers in the reactor building ventilation system during operation of the standby gas treatment system contributed to the late discovery of this design issue. The primary cause of this finding was related to the cross-cutting issue of problem identification and resolution.

The finding was greater than minor because, if left uncorrected, the failure to identify deficient plant equipment would become a more significant safety concern because important systems could be rendered inoperable and because it impacted the barrier integrity cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. In addressing this issue, the licensee gagged each unit's refuel floor damper open to 80 percent to ensure adequate air flow to the standby gas treatment system. The finding was of very low safety significance because the standby gas treatment system was always able to

restore secondary containment differential pressure within the Technical Specifications allowed outage time of four hours.
Inspection Report# : 2005008*(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Significance: G Jun 08, 2005
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Ensure That a Gate to a Posted LHRA was Secured Following Work in the Area
On June 8, 2005, a self-revealing finding of very low safety significance and an associated violation of NRC requirements were identified for the failure to adequately secure/lock the gate to a posted locked high radiation area (LHRA) and physically challenge the access to verify closure and proper latching in accordance with radiation protection procedures. As a result, access to a posted LHRA was unsecured for a period of approximately 24-hours.

The issue was more than minor because it was associated with the Program/Process and Human Performance attributes of the Occupational Radiation Safety cornerstone in that the cornerstone objective to ensure adequate protection of worker health and safety from exposure to radiation was impacted. The issue represents a finding of very low safety significance because it did not involve ALARA planning or work controls, no unauthorized entry into the posted locked high radiation area occurred so there was no overexposure or substantial potential for an overexposure, nor was the licensee's ability to assess worker dose compromised. A non-cited violation of Technical Specification 5.4.1 was identified for the failure to comply with the radiation protection procedure that governs the control of access into high radiation areas. Corrective actions following the identification of the problem included tailgate training for radiation protection staff, development of enhanced pre-job briefing forms for high radiation area entry, performance of an additional physical verification to ensure barriers are secure following work in a locked high radiation area, and plans for additional training specific to high radiation area controls intended for all station radiation workers. Since the principal cause of the problem was a human performance deficiency, the finding also relates to the cross-cutting area of human performance.
Inspection Report# : 2005010*(pdf)*

Public Radiation Safety

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

Last modified : March 03, 2006