

Dresden 2

2Q/2004 Plant Inspection Findings

Initiating Events

Significance:  Apr 04, 2004
 Identified By: NRC
 Item Type: FIN Finding

Several Performance Issues Which Resulted in the Initiation of a Manual Scram Due to High Stator Water Cooling (SWC) System Temperature on December 11, 2003

A self-revealed finding was identified involving several performance issues which resulted in the initiation of a manual scram on Unit 2 due to high stator water cooling system temperature on December 11, 2003. The performance issues included no process for post-maintenance flushing/purging of instrument air lines to prevent foreign material intrusion into pneumatic systems, failure to schedule post-outage controller tuning, and failure to identify and establish monitoring of stator water cooling generator inlet temperature as a critical parameter.

The finding was more than minor because it affected the initiating events cornerstone objective to limit the likelihood of an initiating event. The finding was determined to be of very low safety significance (Green) because all equipment and systems operated as designed during the scram. The licensee identified a number of corrective actions including replacing the stator water cooling temperature control valve controller, identifying critical parameters that require monitoring during non-licensed operator and control room rounds, and establishing requirements for post-maintenance flushing of instrument air lines.

Inspection Report# : [2004002\(pdf\)](#)

Significance:  Sep 30, 2003
 Identified By: NRC
 Item Type: NCV NonCited Violation


Failure to Meet Technical Specification 5.4.1, Fire Protection Program Implementation for Hot Work Activities

A self-revealing finding involving a Non-Cited Violation of Technical Specification 5.4.1 was identified for the failure of an instrument maintenance supervisor to obtain permission from the fire marshal prior to performing hot work. This human performance deficiency resulted in the automatic initiation of the halon system in the auxiliary electric equipment room.

The finding was greater than minor because it affects the initiating events cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions. The issue was determined to be of low safety significance (Green) because the halon system was still operable to extinguish the fire in its incipient stage.

Inspection Report# : [2003007\(pdf\)](#)

Mitigating Systems

Significance:  Jun 30, 2004
 Identified By: Self Disclosing
 Item Type: NCV NonCited Violation

Violation of Technical Specification Section 3.5.1 Unit 2 High Pressure Coolant Injection (HPCI) suction swap overloads were lifted and not re-landed

A self-revealed finding was identified involving a violation of Technical Specification 3.5.1, when the Unit 2 high pressure coolant injection system (HPCI) suction swap-over leads were lifted on March 9, 2004, and not re-landed until discovery on April 12, 2004.

This finding was more than minor because if left uncorrected, the deficiency would become a more significant safety concern. The finding is of very low safety significance because, although they would not have automatically swapped from the condensate storage tanks to the suppression pool, the HPCI suction valves were capable of manual realignment. The station associated alarm procedure requires operator actions to manually perform the swap if automatic realignment does not occur upon a receipt of an alarm of condensate storage tanks level low or torus level hi. To address this issue, the licensee re-landed the leads, reinforced conduct of maintenance expectations, and required increased tracking of work requests.

Inspection Report# : [2004006\(pdf\)](#)

Significance:  Jun 14, 2004
 Identified By: NRC
 Item Type: FIN Finding

Crew Performance on the Dynamic Scenario Portion of the 2004 Facility-Administered Annual Requalification Examination Operating Test

A finding of very low safety significance was identified. The finding was associated with unsatisfactory operating crew performance on the simulator during facility-administered licensed operator requalification examinations. Of the 12 crews evaluated, three did not pass their annual operating tests. The finding is of very low safety significance because the failures occurred during annual testing of the operators on the simulator, because there were no actual consequences to the failures, and because the crews were removed from watch-standing duties, retrained, and re-evaluated before they were authorized to return to control room watches.

Inspection Report# : [2004006\(pdf\)](#)

Significance:  Jun 14, 2004

Identified By: NRC

Item Type: FIN Finding

Individual Operator Performance on the Job Performance Measure or Dynamic Scenario Portion of the 2004 Facility-Administered Annual Requalification Examination Operating Test

A finding of very low safety significance was identified. The finding was associated with unsatisfactory performance of individual operators on the annual licensed operator requalification operating test. Of the 62 licensed operators examined, unsatisfactory performance was identified for two operators during job performance measures (JPMs) and 14 operators in the dynamic scenario portion. The finding is of very low safety significance because the failures occurred during annual testing of the operators on the simulator and simulated performance of tasks in the plant, because there were no actual consequences to the failures, and because the individuals were removed from watch-standing duties, re-trained, and re-evaluated before they were authorized to return to control room watches.

Inspection Report# : [2004006\(pdf\)](#)

Significance:  Apr 04, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement Adequate Corrective Action

A finding of very low safety significance was identified by the inspectors involving a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, for the failure to implement adequate corrective action following the issuance of a previous Non-Cited Violation dated February 6, 2001, in that on May 28, 2002, the licensee again failed to correctly evaluate the test data from performance testing of the Unit 3 isolation condenser. Corrective actions by the licensee included conducting testing of the isolation condenser with a revised methodology and two revisions to the design analysis.

This finding was more than minor because if left uncorrected this issue could become a more significant safety concern. Specifically, the testing deficiencies could allow the acceptance of an isolation condenser that actually had degraded below its design requirements. The issue was of very low safety significance because based on additional testing with a revised methodology as well as the revised analysis, it was concluded that the isolation condenser was capable to perform its design function.

Inspection Report# : [2004002\(pdf\)](#)

Significance:  Dec 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Control Room Unit Supervisor Failed to Use Valid Instrumentation for Monitoring Unit 2 Reactor Pressure

A self-revealing finding involving a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XIV, was identified due to the control room unit supervisor's failure on November 6, 2003, to use valid instrumentation for monitoring Unit 2 reactor pressure during testing. This human performance deficiency by the control room unit supervisor, resulted in the inadvertent opening of the target rock relief valve.

This finding was more than minor because if left uncorrected the practice of using non-functioning control room instrumentation for monitoring plant parameters and conditions would become a more significant safety concern or lead to an operational event. The finding was of very low safety significance because of the availability of reactor level instrumentation; procedures for addressing loss of decay heat removal and inventory; shutdown cooling and emergency core cooling systems; and offsite and emergency power. Corrective actions by the licensee included the removal from shift of the control room operators involved in the event, revision of the appropriate procedure to clearly state which indications to use to monitor reactor pressure in the body of the procedure, implementation of station policies for addressing personnel performance issues, and assignment of senior managers to provide oversight or approval to heightened level of awareness briefings prior to their performance.

Inspection Report# : [2003011\(pdf\)](#)

Significance:  Sep 30, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Re-analyze to Assure Operation of the HPCI Gland Seal Leak Off (GSLO) System at Undervoltage Conditions When the System Was Upgraded to Safety-Related Status

A finding of very low safety significance was identified by the inspectors for a violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control" requirements. The licensee had not updated the controlling calculation to assure that the motors would operate with the undervoltage conditions after the HPCI gland seal leak off turbine gland steam condenser exhaustor and its hotwell drain pump motors were upgraded to safety-related equipment.

This issue was more than minor because the design process allowed upgrading the motors to safety-related without assuring fulfillment of known design

requirements that affected the mitigating system cornerstone objective of ensuring the availability, the reliability, and the capability of HPCI to respond to initiating events to prevent undesirable consequences. Continuous operation of the GSLO system was required to support HPCI operation because of room temperature concerns.

Inspection Report# : [2003007\(pdf\)](#)

Significance:  Aug 29, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Translate Motor Operated Valve (MOV) Duty Cycle Limitations into Specifications, Drawings, Procedures, or Instructions.

A finding was identified by the inspectors for a violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control." The licensee failed to translate Motor Operated Valve (MOV) duty cycle limitations into specifications, drawings, procedures, or instructions. The High Pressure Coolant Injection (HPCI) turbine trip set point was set such that the turbine would experience repetitive starts and stops in certain types of small or medium loss of coolant accidents. This cycling could potentially challenge the reliability of the 2301-8 HPCI injection motor operated valves, which have a design limit of five strokes followed by 30 minutes of cooldown time.

The issue was more than minor because this vulnerability affected the mitigating systems cornerstone objective of ensuring the availability, reliability, and capability of the HPCI system.

Inspection Report# : [2003008\(pdf\)](#)

Significance:  Aug 29, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Protect Equipment From the Effects of a Postulated High Energy Line Break

The inspectors identified a violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control." Although previously identified by the licensee, the licensee failed to protect equipment required to shut down the reactor and maintain it in a safe shutdown condition from the environmental effects of a postulated high energy steam line break. A High Energy Line Break (HELB) in the HPCI system could make the swing diesel, required by both Units 2 and 3, inoperable.

This issue was more than minor because the Unit 2/3 swing diesel generator and associated engineered safety features systems could be degraded by the HELB conditions.

Inspection Report# : [2003008\(pdf\)](#)

Significance:  Aug 29, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Promptly Identify and Correct a Malfunction Within the High Pressure Coolant Injection (HPCI) System Motor Gear Unit (MGU).

A finding was identified by the inspectors for a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions." The licensee failed to promptly identify and correct a malfunction within the High Pressure Coolant Injection (HPCI) system Motor Gear Unit (MGU). Operators identified that the MGU did not operate as designed on May 25, 2001. After two unsuccessful attempts to correct the problem, troubleshooting was accomplished on November 6, 2002, which identified degradation within the MGU motor. The motor was replaced, returning the system to full functionality, on March 12, 2003.

This issue was more than minor because the lack of timeliness associated with resolution of this issue impacted the mitigating systems cornerstone objective of ensuring the availability, reliability, and capability of the HPCI system.

Inspection Report# : [2003008\(pdf\)](#)

Significance:  Aug 29, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Take Appropriate Corrective Action for Multiple Failures of Safety Related 4160V Circuit Breakers.

A finding was identified by the inspectors for a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions." The licensee failed to take appropriate corrective action for multiple failures of safety related 4160V circuit breakers.

This issue is more than minor because it affected the mitigating system cornerstone objective of equipment reliability, in that failure of circuit breakers to operate on demand could cause loss of function of safety related loads needed to mitigate an accident.

Inspection Report# : [2003008\(pdf\)](#)

Emergency Preparedness

Occupational Radiation Safety

Significance:  Jun 30, 2004

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Work crew was exposed to high radiation levels from the accumulation of contaminants in a vacuum cleaner used to clean debris in the Unit 2 condenser

A self-revealed finding of very low safety significance and an associated Non-Cited Violation (NCV) were identified because a work crew was exposed to high radiation levels from the accumulation of contaminants in a vacuum cleaner used to clean debris in the Unit 2 condenser false bottom.

The finding was more than minor because deficiencies with radiological work planning coupled with radiation protection technician work coverage were associated with the "Program and Process" and "Human Performance" attributes of the Occupational Radiation Safety Cornerstone. The finding affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation. The finding was of very low safety significance because work crew radiation exposures were low relative to regulatory limits, there was not a substantial potential for a worker overexposure, and because the licensee's ability to assess worker dose was not compromised. To address this issue, the licensee developed guidance for the use of vacuums in highly contaminated areas, workers were counseled, and the work planning problems were captured in the outage lessons learned database.

Inspection Report# : [2004006\(pdf\)](#)

Public Radiation Safety

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

Significance: **SL-III** Aug 29, 2003

Identified By: NRC

Item Type: VIO Violation

OPERATOR LICENSE RENEWAL REQUEST CONTAINED INACCURATE INFORMATION

To Be Determined. One apparent violation of USNRC requirements was identified by the licensee. The licensee provided inaccurate information to the USNRC in an operator license renewal request. The USNRC approved the license renewal request based on the inaccurate information that was provided. The license renewal request would not have been granted with the correct information provided. This issue will be tracked as an unresolved item pending USNRC review of the circumstances surrounding it.

A Severity Level III violation was issued by letter dated August 29, 2003.

Inspection Report# : [2002015\(pdf\)](#)

Inspection Report# : [2004003\(pdf\)](#)

Last modified : September 08, 2004