

Dresden 2

3Q/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\(pdf\)](#)

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\(pdf\)](#)

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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\(pdf\)](#)

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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\(pdf\)](#)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

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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

Significance:  Oct 16, 2003

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Failure to Perform an Adequate Radiological Survey Prior to the Unconditional Release of Material Outside the RCA

A self-revealed finding of very low safety significance involving a Non-Cited Violation of 10 CFR 20.1501 was identified on October 16, 2003, following a gatehouse radiation monitor alarm at the Braidwood Nuclear Station upon detecting a discrete radioactive particle (DRP) on a worker's boot. The DRP was attributed to the worker's activities at the Dresden facility approximately 1 year earlier. The DRP was not identified at the Dresden Station due to an inadequate radiation survey of the worker following a personnel contamination monitor alarm and also because of limitations with the radiation monitoring instrumentation used at the licensee's egress to the radiologically controlled area (RCA).

Corrective actions for this finding included tailgate training to radiation protection staff that respond to contamination monitor alarms, improvements to automated radiation monitoring capabilities at the main RCA egress, and actions to enhance gamma-sensitivity of those automated radiation monitors located in alternate egress areas and at the protected area gatehouse.

The finding was more than minor because it was associated with the "Program and Process" and "Human Performance" attributes of the Public Radiation Safety Cornerstone, and affected the cornerstone objective that ensures adequate protection of public health and safety from exposure to radioactive materials that are released into the public domain. The issue represents a finding of very low safety significance because public radiation exposure resulting from the problem was not greater than 0.005 rem total effective dose equivalent, the licensee did not have greater than five radioactive material control occurrences in the previous eight quarters and the dose to the involved worker was approximately one percent of the regulatory (10 CFR 20.1201) occupational dose limits for adults. An associated Non-Cited Violation of 10 CFR 20.1501 was identified for the failure to conduct an adequate survey to ensure proper control of radioactive material as required by 10 CFR Part 20, Subpart I, "Storage and Control of Licensed Material"

Inspection Report# : [2004010\(pdf\)](#)

Physical Protection

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

Miscellaneous

Last modified : December 29, 2004