

## Dresden 3

# 1Q/2004 Plant Inspection Findings

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## Initiating Events



**Significance:** Jan 30, 2004

Identified By: NRC

Item Type: FIN Finding

### **Failure to Ensure Operations Procedures Contained Proper Operating Instructions From the Vendor Manual**

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:** 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\(pdf\)](#)

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## Mitigating Systems



**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 exhauster 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\(pdf\)](#)

G**Significance:** Sep 30, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure of Mechanical Maintenance Personnel to Generate a Condition Report after Identifying Loose Bolts on the Standby Liquid Control Relief Valve**

The inspectors identified a finding involving a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, for the failure of mechanical maintenance personnel to generate a condition report after identifying loose bolts on the standby liquid control relief valve. This human performance deficiency resulted in the licensee having to perform a historical operability evaluation on the condition of the system.

The finding was more than minor because it affected the mitigating system cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences.

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



**Significance:** Jun 30, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

**Degraded Mechanical Penetration Fire Barriers**

The inspectors identified a Non-Cited Violation of the Unit 2 and 3 operating licenses for 34 mechanical penetration seals not containing the required minimum of 8" of ceramic fire blanket to establish a 3-hour rated fire barrier.

The finding was more than minor because it affected the mitigating systems cornerstone objective. However, the finding was of low safety significance because for 33 of the 34 seals, no credible fire scenarios could be developed due to physical configuration of post-fire safe shutdown equipment on either side of the penetration seals or the deficient penetration seals were not used to protect safe shutdown capability. For the remaining penetration, the inspectors determined that the recovery actions in the isolation condenser room could be successfully implemented and ensure safe shutdown of the plant.

Inspection Report# : [2003006\(pdf\)](#)

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## Barrier Integrity



**Significance:** Sep 30, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to Operate Unit 3 without Pressure Boundary Leakage as Required by Technical Specification 3.4.4.**

A self-revealing finding involving a Non-Cited Violation of Technical Specification 3.4.4 was identified for the licensee's failure to ensure that Unit 3 was not operated with reactor coolant pressure boundary leakage. As a result of this human performance deficiency, the licensee was not in compliance with Technical Specifications on two occasions for Unit 3 while operating with pressure boundary leakage.

The finding was considered more than minor because the issue affected the barrier integrity cornerstone. This finding was evaluated using phase one of the significance determination process (SDP) which screened Phase 2 because the finding affected the reactor coolant system barrier. In reviewing the Phase 2 assessment performed by the resident inspectors, the senior reactor analyst (SRA) identified that the dominant sequence small loss of coolant accident in the Dresden SDP Worksheet were potentially risk significant. Further review by the SRA identified that this sequence was an overly conservative sequence. Therefore, determined that this finding was of low safety significance.

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

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## Emergency Preparedness

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## Occupational Radiation Safety

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## Public Radiation Safety

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## Physical Protection

## 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 : May 05, 2004