

Dresden 3

1Q/2003 Plant Inspection Findings

Initiating Events

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: FIN Finding

Unit 3 Scram on Loss of Main Shaft Oil Pump

The inspectors identified one finding regarding a number of performance issues associated with the licensee's failure to properly implement vendor recommendations for the main turbine. The performance issues included improper implementation of vendor recommendations for monitoring shaft voltage, inadequate acceptance criteria for shaft voltage, and deferral of preventive maintenance. This finding was more than minor because it resulted in an initiating event (scram) on Unit 3. The finding was of very low safety significance because all equipment operated as designed during the scram. No violation of NRC requirements occurred as a result of the licensee's failure to adequately implement vendor recommendations for non-safety related equipment.

Inspection Report# : [2003002\(pdf\)](#)

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Unexpected Half Scram On Unit 3 During Fuse Inspection

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, due to the licensee's failure to update a drawing for the average power range monitors. As a result, a self revealing event, a half-scram, occurred on Unit 3 during a fuse inspection activity. This finding was more than minor because if left uncorrected, this issue could become a more significant safety concern by resulting in an initiating event. However, because a scram did not occur, this finding was determined to be of very low safety significance.

Inspection Report# : [2003002\(pdf\)](#)

Significance:  Jun 30, 2002

Identified By: NRC

Item Type: FIN Finding

Deficient Human Performance Associated with Offgas System Testing Contributed to a Manual Scram of Unit 3

A finding was identified involving deficient human performance during off-gas system testing, which resulted in operators manually initiating a scram of Unit 3 on May 4, 2000, due to degrading condenser vacuum conditions and increasing condensate inlet temperature. This finding was more than minor because the event was potentially an initiating event. This event had minimal safety significance because the operator action of scrambling the unit was consistent with plant procedures and pre-briefed in accordance with conservative decision making philosophy. (Section 4OA3.10)

Inspection Report# : [2002008\(pdf\)](#)

Mitigating Systems

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: FIN Finding

Inadequate Operability Evaluation Prepared for Generic Non-conforming Condition if 480 Volt Motor Control Center Auxiliary Contact Assemblies

The inspectors identified one finding regarding the licensee's preparation of an inadequate operability evaluation. The finding involved inadequacies in the licensee's documented operability evaluation for a generic non-conforming condition affecting a number of safety-related 480 volt motor control center cubicle (MCC) auxiliary contact assemblies. This finding was more than minor because it could be reasonably viewed as a precursor to a significant event, and if left uncorrected, the finding could become a more significant safety concern because the station could have non-conforming conditions which render safety-related equipment inoperable, even though the operability evaluations would conclude the equipment was operable. The finding was of very low safety significance because none of the safety related plant equipment was adversely affected by the non-conforming condition. Even though inadequacies were noted in the evaluation, the equipment was ultimately determined to be operable and no violations of NRC requirements were identified.

Inspection Report# : [2003002\(pdf\)](#)

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Station's Untimely Response to Generic Non-conforming Condition with 480 Volt Motor Control Center Auxiliary Contact Assemblies

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, due to the licensee's failure to promptly implement effective corrective actions upon the discovery of a generic non-conforming condition affecting a number of safety related 480 volt motor control center cubicle (MCC) auxiliary contact assemblies on both units. This finding was determined to be more than minor because it could be reasonably viewed as a precursor to a significant event and if left uncorrected the finding could become a more significant safety concern because the station personnel could fail to evaluate non-conforming conditions which could render safety related equipment inoperable. The finding was of very low safety significance because safety related plant equipment was not rendered inoperable as a result of the degraded condition.

Inspection Report# : [2003002\(pdf\)](#)

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Violation of 10 CFR Part 50, Appendix B, Criterion III, Including Live Load in the Reactor Building Crane Calculation

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified for failure to incorporate the rated live load of the RB crane into the original calculations for the reactor building (RB), a Seismic Category 1 structure. Significant NRC intervention was required over a two year period to ensure the licensee resolved the compliance and safety issues related to the qualification of the reactor building crane in a manner consistent with the Dresden licensing basis and NRC regulations. The finding is of more than minor significance because it affects the cornerstone attribute of design control as it relates to both the Mitigating System and Barrier Integrity cornerstone objectives. Due to the low seismic initiating event frequency, the short duration of time that the heavy loads were

suspended on the RB crane, the nature of the load path and load lift controls, and the recent licensee calculations which demonstrated that the RB superstructure will support the crane in a seismic event, the findings were determined to be of very low safety significance

Inspection Report# : [2003002\(pdf\)](#)

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Violation of 10 CFR Part 50, Appendix B, Criterion III, Overstressed Structural Steel

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified for the licensee's failure to ensure design stresses in roof truss members and interior building column members of the RB superstructure remained below allowable limits. Significant NRC intervention was required over a two year period to ensure the licensee resolved the compliance and safety issues related to the licensee's allowance of stress values above allowable design limits in a manner consistent with the Dresden licensing basis and NRC regulations. The finding is of more than minor significance because it affects the cornerstone attribute of design control as it relates to both the Mitigating System and Barrier Integrity cornerstone objectives. Due to the low seismic initiating event frequency, the short duration of time that the heavy loads were suspended on the RB crane, the nature of the load path and load lift controls, and the recent licensee calculations which demonstrated that the RB superstructure will support the crane in a seismic event, the findings were determined to be of very low safety significance

Inspection Report# : [2003002\(pdf\)](#)

Significance:  Dec 28, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Adequacy of the Plant-Referenced Simulator to Conform With Simulator Requirements Specified in 10 CFR 55.46

Green. The inspectors identified a Non-Cited Violation (NCV) of 10 CFR 55.46(d)(1), "Continued Assurance of Simulator Fidelity" due to the licensee's failure to adequately maintain simulator fidelity for two discrepancies, that had both an actual and potential plant impact. The deficiencies included an incorrect first stage pressure turbine trip reactor scram bypass setpoint and the incorrect operation of the reactor water cleanup (RWCU) room temperature instrument recorder. This finding was more than minor because the incorrect first stage pressure turbine trip reactor scram bypass setpoint in the simulator had an actual impact on the plant. The incorrect simulator setpoint led to inaccurate training, that subsequently failed to adequately alert the licensed operators of the potential impact of first stage pressure conditions during an actual reactor startup following the Unit 2 power uprate. The lack of simulator fidelity combined with the operators' lack of awareness/attention to the plant effects from the turbine first stage pressure led to an actual reactor scram during the November 7, 2001, reactor startup (see Licensee Event Report 50-237/2001-005-00).

Although an actual reactor scram occurred due to high turbine first stage pressure, the finding is of very low safety significance because the discrepancy was on the simulator and the actual plant responded as expected to the high turbine first stage pressure and all safety-related equipment functioned properly. The incorrect operation of the temperature instrument recorder led to an incorrect emergency classification by the Shift Manager during the recent licensed operator requalification annual operating examination. The finding is also of very low safety significance because the discrepancy was on the simulator and the real recorder in the plant functioned properly. Furthermore, no actual plant emergency occurred and there was no actual impact on equipment or personnel safety. (1R11.3)

Inspection Report# : [2002017\(pdf\)](#)

Significance:  Dec 28, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform an Adequate Assessment of Risk When High Pressure Coolant Injection System was Unavailable

Green. The inspectors identified a Non-Cited Violation of 10 CFR Part 50.65 due to the licensee's failure to perform an adequate assessment of risk during maintenance on the high pressure coolant injection system. The inspectors concluded that the issue was more than minor since the finding involved a change in risk level from Green to Yellow and, if left uncorrected, could become a more significant safety concern. This conclusion was based on the fact that an adequate assessment of risk could have led to additional management strategies including establishment of protected pathways for redundant mitigating systems.(1R13)

Inspection Report# : [2002017\(pdf\)](#)



Significance: Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

The licensee routinely failed to follow the procedure for installing, inspecting and removing scaffolding.

The inspectors identified that the licensee routinely failed to follow the procedure for installing, inspecting and removing scaffolding as indicated by several examples of incorrectly installed scaffolding. This finding was repetitive and indicated weakness in problem identification and resolution. This finding was considered more than minor because the inspectors' continued identification of this issue during the inspection period demonstrated routine failure to follow the scaffolding installation and inspection procedure. The finding was determined to be of very low safety significance because all of the safety-related equipment affected by the scaffolding remained fully capable of performing all of their safety functions. This finding was dispositioned as a Non-Cited Violation. (1R04)

Inspection Report# : [2002012\(pdf\)](#)



Significance: Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

The licensee failed to follow the procedure for ensuring timely fire watch response.

The inspectors identified that the licensee failed to follow the procedure for ensuring timely fire watch response. This finding was repetitive and indicated weakness in problem identification and resolution. This finding was considered more than minor because the inspectors' continued identification of this issue demonstrated that failure to follow the fire watch procedure was a repetitive problem. This finding was considered to be of very low safety significance because no fire occurred and there was no actual impact on equipment or personnel safety. This finding was dispositioned as a Non-Cited Violation.

Inspection Report# : [2002012\(pdf\)](#)



Significance: Jun 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Potential to Lift Standby Liquid Control Pump Discharge Relief Valves During ATWS (Anticipated Transients Without Scram) Transient

A finding involving a Non-Cited Violation was identified for failure to comply with 10 CFR 50.62 due to the potential to lift standby liquid control system relief valves during an anticipated transient without scram on Unit 3. This finding was considered more than minor because the issue affected the function of a mitigating system. The risk significance of this issue was determined to be very low because the standby liquid control system could be recovered during an anticipated transient without scram event. Cycling of the relief valves would not prevent most of the borated solution from being injected into the reactor pressure vessel, and the licensee was able to demonstrate that the station remained

within the acceptance criteria of their original anticipated transient without scram analyses during the relief valve lifts. (Section 1R15)

Inspection Report# : [2002008\(pdf\)](#)

Significance:  May 10, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Reactor Water Level Could Drop Below Top of Active Fuel in the Event of Fire

The inspectors identified, that in the event of a fire, reactor water level could decrease to below top of active fuel. Although the licensee had taken credit for tripping the reactor recirculation pumps, the procedures for alternative safe shutdown did not direct operators to trip the pumps. The additional heat load from the reactor recirculation pumps would cause additional reactor coolant to be lost through the safety relief valves resulting in a lower reactor water level than assumed. The failure to ensure reactor water level would remain above the top of active fuel is a violation of 10 CFR 50, Appendix R, Section III.L.2.b. The finding was greater than minor because the failure to ensure that reactor water level would remain above the top of active fuel resulted in a reduction of safety margin. The finding was determined to be Green because the water level would remain above two thirds core height and core damage would not occur. Because the finding was of very low safety significance, and the finding was captured in the licensee's corrective action system, this finding is being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy (Section 1R05.1.b.1).

Inspection Report# : [2002006\(pdf\)](#)

Barrier Integrity

Significance:  Mar 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Corrective Actions for Exceeding MELLLA Limit

The inspectors identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, due to the licensee's inadvertent entry into an unanalyzed region of the Unit 3 power-to-flow map on several occasions. This finding was more than minor because the licensee demonstrated inadequate reactivity management control which resulted in exceeding the Maximum Extended Load Line Limit Analysis (MELLLA) flow control line (FCL) limits on a number of occasions. This could have challenged one of the physical design barriers (fuel cladding) that protect the public from radionuclide releases. This finding was determined to be of very low risk significance because the operators did not exceed any thermal limits on the unit. (Section 4OA2)

Inspection Report# : [2003002\(pdf\)](#)

Emergency Preparedness

Significance:  Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

The inspectors identified a Non-Cited Violation of Technical Specification 5.5.3 for the failure to fully implement the program for post accident sampling.

The inspectors identified a Non-Cited Violation of Technical Specification 5.5.3 for the failure to fully implement the program for post accident sampling to ensure the capability to obtain containment (drywell) atmosphere samples under accident conditions, as required by chemistry procedures (Section 2OS3.2). The finding included a cross-cutting element as a contributing factor related to the licensee's problem identification and corrective actions because the problem was identified by the licensee but not adequately evaluated or promptly corrected. The finding was determined to be of very low safety significance because the high radiation sampling (post accident sampling) system, which included equipment for containment air sampling, was installed consistent with the licensee's Updated Final Safety Analysis Report, the equipment was recently demonstrated to be operable, and because alternate means of sampling the containment atmosphere and assessing core degradation under accident conditions were available. (2OS3)

Inspection Report# : [2002012\(pdf\)](#)

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Significance:  Jul 31, 2002

Identified By: NRC

Item Type: FIN Finding

Security personnel who participated in a performance exercise demonstrated a reduced level of proficiency than that necessitated by the licensee's established protective strategy plan.

The inspector observed that security personnel who participated in a performance exercise on July 18, 2002, demonstrated a reduced level of proficiency than that necessitated by the licensee's established protective strategy plan. The finding affected safety because it demonstrated a reduced level of proficiency needed to support the licensee's established protective strategy. This finding was evaluated through the SDP and determined to be of very low safety significance because no intrusions had occurred, and there had not been greater than two findings in the last four quarters. There is no specific requirement for this specific demonstration of proficiency in the licensee's approved security plan; therefore, no violation occurred (Section 3PP3).

Inspection Report# : [2002013\(pdf\)](#)

Significance:  Apr 19, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to search several items prior to their access to the protected area.

The inspector identified a failure to search several items prior to their access to the protected area (NCV 50-237/02-09-01; 50-249/02-09-01). This finding had a credible impact on safety because unauthorized material could have entered the site undetected, and the failure to conduct an adequate search is a violation of the NRC approved Dresden security

plan. This finding was evaluated through the SDP and determined to be of very low safety significance. The failure represented a vulnerability in the licensee's access control program; however, it was not a malevolent act, and there had not been greater than two similar findings in the last four calendar quarters (Section 3PP2).

Inspection Report# : [2002009\(pdf\)](#)

Miscellaneous

Last modified : May 30, 2003