

## Dresden 3

### Initiating Events

**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\(pdf\)](#)

**Significance:**  Feb 07, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Failure to include proper post-maintenance verification techniques in the maintenance and operations procedures**

Green. The inspectors identified a Non-Cited Violation for inadequate post-maintenance testing on the 3B reactor recirculation pump motor generator set which resulted in an operator being unable to trip the pump following a pump run-up event and a subsequent reactor scram (NCV 50-249/02-03-05). This finding was considered more than minor because it had an actual impact on reactor safety. The inability to trip the reactor recirculation pump from the control room resulted in the pump tripping without normal coastdown and an abrupt change in core flow, reactor vessel level and feedwater flow. These conditions resulted in a scram (or initiating event). However, because all other mitigating equipment was available and operated normally, this finding was considered to be of very low safety significance (4AO3.2).

Inspection Report# : [2002003\(pdf\)](#)

**Significance:**  Feb 16, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Two instrument maintenance technicians failed to follow a surveillance procedure which resulted in an unexpected half scram.**

On February 16, 2001, two instrument maintenance technicians failed to follow a surveillance procedure which resulted in an unexpected half scram. Additionally, the technicians inadvertently rendered the 'A' channel of the scram discharge volume high-level scram input logic inoperable. Failure to follow the procedure while performing the surveillance test was considered a Non-Cited Violation of Dresden Technical Specifications. This finding, if left uncorrected, would become a more significant concern and could cause an increase in the frequency of an initiating event because with the plant in this unrecognized condition operators could inadvertently complete the scram initiation logic. This finding did have a credible impact on safety; however, because only the initiating event cornerstone is affected and associated assumptions have no other impact than slightly increasing the likelihood of an uncomplicated

reactor scram, this finding is considered to be of very low safety significance (Green) (Section 1R14).

Inspection Report# : [2001008\(pdf\)](#)

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**Significance:** Jan 04, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

**Inadvertent opening of an emergency relief valve due to a technician's failure to follow procedure**

On November 11, 2000, an instrument maintenance technician failed to follow a surveillance procedure which resulted in the inadvertent opening of the 3B electromatic relief valve. Failure to follow the procedure while performing the surveillance was considered a Non-Cited Violation of Technical Specifications. The event had minimal safety significance because the valve was closed within 10 seconds of opening, reactor pressure control responded as expected with no reactor level or pressure transients, and the 3B electromatic relief valve was returned to operable status prior to exceeding the allowed time per Technical Specifications (Section 1R14).

Inspection Report# : [2000021\(pdf\)](#)

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**Significance:** Nov 14, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

**Incorrect calibration on local power range monitor on Unit 3 and Unit 2 local power range monitor not properly returned to service.**

On October 9, 2000, instrument maintenance personnel on Unit 3 incorrectly set a calibration current for local power range monitor (LPRM) 48-25C and inappropriately manipulated LPRM 24-41A switch from bypass to operate. On October 10, 2000, instrument maintenance failed to return LPRM 24-25C from bypass to the operate position on Unit 2. Each of these errors involved a failure to follow procedures and were considered examples of a non-cited violation of Technical Specifications. The inspectors reviewed these issues using the significance determination process and determined that these issues were of very low risk significance because no actual loss of safety function occurred (Section 1R22.1).

Inspection Report# : [2000016\(pdf\)](#)

G

**Significance:** Sep 30, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

**Incorrect fuse removed**

On August 28, 2000, an instrument mechanic removed a fuse from the wrong reactor protection system motor-generator bus causing an unexpected half scram. The mechanic's failure to follow the procedure while performing this work was considered a Non-cited Violation (NCV) of Technical Specifications. The inspectors considered this event to be of very low safety significance because no actual loss of safety function occurred. (Section 1R13.1).

Inspection Report# : [2000013\(pdf\)](#)

G

**Significance:** Sep 30, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

**Wrong Contactor specified**

On May 8, 2000, a materials engineer specified an incorrect contactor coil to be installed in the reactor protection system motor generator set feed breaker. During subsequent testing on September 2, 2000, the breaker tripped and the

breaker cubicle was damaged. The failure to properly implement design control measures to ensure installation of the correct contactor was considered a NCV of 10 CFR Part 50, Appendix B, Criterion III, Design Control. The inspectors reviewed this issue using the significance determination process and determined that this event was of very low risk significance because failure of the contactor coil would not have prevented the motor-generator set from performing its safety function. (Section 1R13.2).

Inspection Report# : [2000013\(pdf\)](#)

**Significance:**  May 08, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to follow electrical procedure caused Unit 3 reactor scram**

The licensee used the incorrect trip time range criteria for testing the reactor protection system motor generator "B" feeder breaker thermal overload relay. This error resulted in an uncomplicated Unit 3 trip. All mitigation systems remained operable and barrier integrity was not challenged. A non-cited violation was documented for failure to follow a procedure. The risk significance of the reactor scram was very low since the scram was uncomplicated and all mitigating systems remained operable.

Inspection Report# : [2000006\(pdf\)](#)

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## Mitigating Systems

**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**

Green. 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\(pdf\)](#)



**Significance:** Mar 31, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to Prepare Supporting Operability Documentation for Additional Safety Related Components with Missing Lock Washers in the Auxiliary Contact Assembly in the Motor Control Center Cubicle**

A Non-Cited Violation was identified for the licensee's failure to prepare supporting operability documentation for 36 safety related 480 volt MCC cubicles which had missing lock washers in their auxiliary contact assemblies (NCV 50-237/249/02-04-04). The finding was of very low safety significance because it was determined that all 36 degraded components were operable (4OA2).

Inspection Report# : [2002004\(pdf\)](#)



**Significance:** Mar 31, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**Inadequate Corrective Actions for Missing Reactor Protection System Cable Tray Covers**

A Non-Cited Violation was identified for the licensee's failure to promptly identify and correct the condition of missing reactor protection system (RPS) cable tray covers. The finding was of very low safety significance because in each case two other RPS channels are routed in a different location which are sufficient to allow the RPS system to perform its intended safety function (4OA2).

Inspection Report# : [2002004\(pdf\)](#)



**Significance:** Mar 31, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**Ineffective Corrective Actions for Test Equipment**

A Non-Cited Violation was identified for the licensee's failure to correct conditions adverse to quality when station personnel incorrectly connected test equipment to the emergency diesel generator. The finding was of very low safety significance since the incorrect connection did not have any adverse impact on the plant.

Inspection Report# : [2002004\(pdf\)](#)



**Significance:** Feb 07, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**Inadequate surveillance procedure for the isolation condenser initiation time delay relay**

Green. The inspectors identified a Non-Cited Violation for an inadequate surveillance procedure for calibrating the reactor high pressure initiation time delay relays for the Isolation Condenser which left the relays without any margin for drift. This resulted in three out of the four time delay relay settings being found out-of-tolerance and in

noncompliance with the Technical Specification requirements. This out-of-tolerance condition could have prevented the Isolation Condenser from receiving an initiation signal within the 15-second Technical Specification time limit (NCV 50-249/02-03-02). This finding was considered more than minor because it could be reasonably viewed as a precursor to a significant event. Failure to consider instrument drift while performing instrument calibrations can result in equipment being outside of allowable limits over the surveillance period. However, because the isolation condenser system did not lose the ability to perform its safety function and all other mitigating systems were available this finding was considered to be of very low safety significance (1R22).

Inspection Report# : [2002003\(pdf\)](#)



**Significance:** Feb 06, 2002

Identified By: NRC

Item Type: FIN Finding

**The inspectors determined from operator log entries that the station blackout diesel (SBO) 2A air compressor breaker had tripped approximately 20 times since March 2001.**

Green. The inspectors determined from operator log entries that the station blackout diesel (SBO) 2A air compressor breaker had tripped approximately 20 times since March 2001. The repetitive trips were documented by operations in the control room logs; however, the licensee did not initiate a condition report for each trip. The corrective actions taken by the licensee to correct this problem were ineffective and a common cause analysis was initiated in January 2002. Also, a rework evaluation was not initiated until questioned by the inspectors in January 2002. Lack of timely and effective action is a corrective action issue that is more than minor because if left uncorrected, would become a more significant safety concern for SBO diesel availability. However, the safety significance was very low because with a second air start train available, the breaker trips did not make an SBO diesel unavailable.

Inspection Report# : [2002002\(pdf\)](#)



**Significance:** Feb 06, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**The 2A component cooling service water (CCSW) pump failed the quarterly surveillance due to high vibrations.**

The 2A component cooling service water (CCSW) pump failed the quarterly surveillance due to high vibrations on 8/16/01. Foreign material was found obstructing the pump and an apparent cause evaluation (ACE) was assigned to the issue. The ACE identified three similar fouled CCSW pumps in the previous 10 months. Subsequently a common cause analysis was assigned for the 11 fouling events which had occurred since 1985. Failure to correct the causes for CCSW foreign material intrusion from 11/14/00 and 12/07/00 to 8/16/01 was a Non-Cited Violation of Appendix B. The issue of fouling component cooling service water pumps had an actual impact on safety, so it was more than minor. However, when the 2A pump was found fouled on 8/16/01, flow was reduced, but not stopped, and the other component cooling service water pumps were available, therefore the safety significance for this occurrence was concluded to be very low (Green).

Inspection Report# : [2002002\(pdf\)](#)



**Significance:** Jun 08, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

**Inadequate Design Review of Modification**

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III "Design Control," was identified for an inadequate design review of modifications made to the Unit 2 and Unit 3 emergency core cooling system suction strainer flanges. The design review failed to account for the loss of metal at the flange bolt holes due to corrosion and lacked a technical basis for the use of hybrid formula and acceptance criteria derived from differing Code Editions and

Sections. This finding was greater than minor because, if left uncorrected, it could have become more significant in that, loss of metal at the bolt holes due to corrosion, could have eventually weakened the flanges to the point that failure would occur under accident loads. If these flanges failed during a large break loss of coolant accident, debris generated by this accident would enter emergency core cooling systems and could cause wide spread component failures (e.g., pumps, heat exchangers, spray nozzles). This finding was of very low safety significance because the licensee determined that the flanges were operable and only the mitigating event cornerstone was affected.

Inspection Report# : [2001009\(pdf\)](#)

G

**Significance:** Jun 08, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

**Inadequate Surveillance Test Acceptance Criterion**

A Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XI "Test Control," was identified for inadequate acceptance criteria for Containment Cooling Service Water and Low Pressure Coolant Injection flow rate measurements in surveillance DOS 1500-12. The surveillance criteria failed to incorporate or consider the calculated uncertainty of the flow rate instrumentation used in the test. This finding was greater than minor because, if left uncorrected, it could have become more significant. Following a Loss of Coolant Accident (LOCA) after a planned future power uprate when margins are reduced, flows less than the analytical limit could result in torus water temperature exceeding the limit specified and exacerbating existing net positive suction head deficiencies with the emergency core cooling system pumps. The finding was of very low safety significance. There were no occurrences identified where the pumps in either system were inoperable.

Inspection Report# : [2001009\(pdf\)](#)

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**Significance:** Jan 26, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to appropriately evaluate thermal performance test data associated with the isolation condensers to assure that test requirements have been satisfied. 10 CFR 50 App B Criterion XI.**

One Non-Cited Violation was identified for the licensee's failure to appropriately evaluate test data associated with measuring the thermal performance of the isolation condensers to assure that test requirements had been satisfied. The safety significance of this finding was very low because the affected mitigation system remained operable. This issue was considered more than minor, because if left uncorrected, it could impact the ability of the licensee to detect degradation or loss of isolation condenser function.

Inspection Report# : [2001006\(pdf\)](#)

G

**Significance:** Jan 26, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to enter and appropriately evaluate the concern for the isolation condenser shell side integrity (condition adverse to quality) in the corrective action system. 10 CFR 50 App B, Criterion XVI**

One Non-Cited Violation was identified for the licensee's failure to enter in the corrective action system and appropriately evaluate a concern for the isolation condenser shell side integrity. The safety significance of this finding was very low because the affected mitigation system remained operable. This issue was considered more than minor, because it was not adequately evaluated since identification in 1996, and it had the potential to challenge accident mitigation associated with a tube rupture in the isolation condenser.

Inspection Report# : [2001006\(pdf\)](#)

**Significance:**  Sep 30, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

**HPCI system pipe replacement modification**

On September 22, 2000, the inspectors' review of an operability evaluation for pipe replacement on the high pressure coolant injection system identified that the licensee had performed an inadequate like-for-like replacement parts evaluation in that yield strength differences were not considered. The failure to properly implement design control measures to ensure the equivalent replacement of safety-related piping was considered a NCV of 10 CFR Part 50, Appendix B, Criterion III, Design Control. The inspectors reviewed this issue using the significance determination process and determined that this event was of very low risk significance because the strength difference did not significantly change the seismic calculations and the operability of the high pressure coolant injection system was not impacted. (Section 1R15).

Inspection Report# : [2000013\(pdf\)](#)

**Significance:**  Aug 10, 2000

Identified By: NRC

Item Type: FIN Finding

**Area temperature sensors used in Dresden Emergency Operating Procedure (EOP) 0300-01, "Secondary Containment Control" Revision 6, were inadvertently painted**

The inspectors noted that the area temperature sensors used in Dresden Emergency Operating Procedure (EOP) 0300-01, "Secondary Containment Control" Revision 6, were inadvertently painted. The paint could delay entry into the EOP by preventing the sensors from properly sensing area temperature. Through a Significance Determination Process Phase 1 screening, the inspectors concluded that the painted sensors did not result in the actual loss of any mitigating systems, and therefore the issue was of very low safety significance. (Section 1R04)

Inspection Report# : [2000011\(pdf\)](#)

**Significance:**  Aug 10, 2000

Identified By: NRC

Item Type: FIN Finding

**Operating Flood Barrier Surveillance had not been completed and maximum safe water level placards in the reactor building were missing**

The inspectors, and independently the licensee, noted that Dresden Technical Surveillance Procedure 0020-04, "Operating Flood Barrier Surveillance," Revision 6, had not been completed even though the procedure was supposed to be performed once every refueling cycle. The inspectors also noted that maximum safe water level placards in the reactor building were missing. The placards were used in Dresden Emergency Operating Procedure 0300-01, "Secondary Containment Control." Through a Significance Determination Process Phase 1 screening, the inspectors concluded that the findings did not involve the degradation of equipment designed to mitigate a flooding initiating event or the loss of any safety function that contributed to external event-initiated core damage accident sequences. The findings were of very low safety significance. (Section 1R06)

Inspection Report# : [2000011\(pdf\)](#)

**Significance:**  Jun 27, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to follow operability evaluation procedure**

The licensee failed to declare the 2D containment cooling service water pump inoperable and repair the pump after discovering evidence of leakage from a weld on the pump's discharge piping. A Non-Cited Violation (NCV) was documented for failing to follow procedures during execution of the operability evaluation to address leakage from an ASME Class 3 system. The unavailability of the 2D containment cooling service water pump was of very low risk significance due to the availability of other mitigating systems. (Section R15).

Inspection Report# : [2000007\(pdf\)](#)

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## Barrier Integrity

**Significance:**  Jul 13, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

**Dresden Operating Procedure 1600-1 was inappropriate for the circumstances in that the wording of the procedure prevented the performance of the Emergency Operating Procedure step.**

Green. Dresden Emergency Operating Procedure 200-1, "Primary Containment," referenced the use of Dresden Operating Procedure 1600-1, "Normal Pressure Control of the Drywell or Torus," Revision 17, for venting the drywell with pressure below 2 pounds per square inch gauge. Dresden Operating Procedure 1600-1 was inappropriate for the circumstances in that the wording of the procedure prevented the performance of the Emergency Operating Procedure step. The inspector identified this as a non-cited violation due to an inadequate normal operating procedure for performing the Dresden Emergency Operating Procedure 200-1. This event was more than minor because it had a credible impact on safety in that normal operating procedure steps precluded the performance of an emergency operating procedure step. The purpose of the emergency operating procedure step was to allow for a more controlled approach to minimizing drywell pressure before the introduction of drywell spray. Therefore, the venting of the drywell to maintain pressure and delay or prevent drywell spray has a credible impact on the amount of time operators have to combat an event which could eventually challenge the integrity of the reactor containment. The issue was determined to be of very low safety significance because the ability to spray down the drywell was not affected and, although complicated by the procedure inadequacy, the drywell could still be vented. (Section 1R5)

Inspection Report# : [2001016\(pdf\)](#)

**Significance:**  Nov 14, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to ensure that full stud/nut engagement was achieved on the 1B MSIV**

On October 1, 2000, mechanical maintenance personnel improperly reassembled the Unit 3 1B main steam isolation valve. There was less than full thread engagement on the packing follower nuts which subsequently required an engineering evaluation. Failure to follow the procedure while performing this work was considered a non-cited violation of Technical Specifications (Section 1R20). The risk significance of this issue was minimal due to the engineering evaluation concluding that the valve remained operable with the current thread engagement (Section 1R20).

Inspection Report# : [2000016\(pdf\)](#)

**Significance:**  Nov 14, 2000

Identified By: NRC

Item Type: NCV NonCited Violation



**Licensed operator failed to generate the correct out-of-service card for H2O2 monitor.**

On November 2, 2000, operators incorrectly prepared an out-of-service card for the 3B H2O2 monitor which resulted in the 3A H2O2 monitor being taken out-of-service. A failure to follow the procedure in preparing the correct out-of-service card resulted in both Unit 3 H2O2 monitors being inoperable. The inspectors considered this issue a non-cited violation of Technical Specifications. Although the operators inadvertently placed Unit 3 in an unplanned 7-day Technical Specification Limiting Condition for Operation Action Statement, the inspectors considered this event to be of very low risk significance because no abnormal condition existed which required the use of the H2O2 monitors, the H2O2 system was only unavailable for five minutes, and the safety function could be achieved through the use of other sample systems (Section 1R22.2).

Inspection Report# : [2000016\(pdf\)](#)

**Significance:**  Sep 30, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

**Improperly changed tap setting**

On September 27, 2000, the licensee discovered that the overvoltage coil tap setting for the undervoltage relays on Bus 34 (4160 KV) had been changed without using the station's design control process. This error would have resulted in the loss of the 'C' and 'D' containment cooling service water pumps during a loss of offsite power transient. The licensee's failure to implement sufficient design control measures for changing the overvoltage coil tap setting was considered a NCV of 10 CFR Part 50, Appendix B, Criterion III, Design Control. The safety significance of this issue was minimal due to the availability of the 'A' and 'B' containment cooling service water pumps. (Section 1R20b.1).

Inspection Report# : [2000013\(pdf\)](#)

**Significance:**  Sep 30, 2000

Identified By: NRC

Item Type: FIN Finding

**The 'A' feedwater header check valves & both the 'B' inboard & outboard main steam line valves failed local leak rate tests**

On September 19, 2000, the licensee made an emergency notification system (ENS) call under 50.72 (b)(2)(i) to the NRC regarding local leak rate test (LLRT) failures of both the inboard and outboard 'A' header feedwater check valves (FWCVs). The licensee determined that the leakage for each valve was unquantifiable because the test volume would not hold pressure. As a result, this leakage exceeded the containment pathway leakage values allowed by the Primary Containment Leakage Rate Testing Program. The licensee made a follow-up ENS call to the NRC on September 20, 2000, after LLRT results on the 'B' inboard and outboard main steam isolation valves (MSIV) indicated that leakage from each valve also exceeded the TS maximum allowed leakage value of a total of 46 standard cubic feet per minute for all four main steam lines. The inspectors reviewed this issue using the containment integrity significance determination process and determined that these failures were of very low risk significance because even though the valves leaked, they did shut, and therefore, did not constitute a large early release pathway. (Section 1R20.2).

Inspection Report# : [2000013\(pdf\)](#)

**Significance:**  Sep 29, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

**The licensee failed to properly implement temperature requirements during ultrasonic examinations**

The inspectors identified that the licensee failed to properly implement temperature requirements during ultrasonic examinations of three reactor vessel assembly welds. The examinations had recorded temperatures which exceeded procedural limits for the maximum temperature difference between examination and calibration block surface

temperatures. Both licensee and contractor personnel had reviewed and approved the exams. Review of other manual UT examinations found an additional seven-weld examinations where ultrasonic temperature requirements also appeared to have been exceeded due to the misplacement of the field thermometer in relation to where the ultrasonic beam was traveling. In addition, licensee/contractor procedural requirements for ultrasonic examination scanning speed were not met for one weld. The safety significance of these issues was very low based on the absence of adverse consequences, and because the licensee has another outage opportunity to make-up the examinations prior to the end of the ten-year ISI interval. The failure to follow procedures and control special processes which could result in the failure to detect degradation of a reactor coolant boundary component, was considered a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion IX, "Control of Special Processes" (Section 1RO8).

Inspection Report# : [2000017\(pdf\)](#)

**Significance:**  Sep 29, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure of the corrective action program to properly evaluate inservice inspection related corrective actions.**

The inspectors identified two examples of a failure of the corrective action program to properly evaluate inservice inspection related corrective actions. While reviewing original construction radiographs to better characterize an indication found during a 1999 ultrasonic examination of a core spray weld, the licensee failed to evaluate an indication discovered on the film which had not been dispositioned on the original reader sheet. In a second instance, the licensee did not properly evaluate the required inspection scope expansion when two snubbers were found with defects. The safety significance of these issues was considered very low based on the absence of adverse consequences and the fact that the licensee has another outage opportunity to resolve the examinations. Failure to promptly identify and correct issues found during the examination of ASME Code piping and components was considered a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action" (Section 4OA1).

Inspection Report# : [2000017\(pdf\)](#)

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## Emergency Preparedness

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## Occupational Radiation Safety

**Significance:**  Feb 01, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to perform routine radiological surveys in accordance with procedures**

The inspector identified a Non-Cited Violation of Technical Specification 5.4.1 concerning the failure of the licensee to conduct required, routine radiological surveys in accordance with the frequencies specified in its radiation protection procedures and instructions. The finding was of very low significance because the late and missed surveys did not result in an unidentified radiological hazard and did not result in a substantial potential for an overexposure of an individual.

Inspection Report# : [2002003\(pdf\)](#)

**Significance:**  Feb 01, 2002

Identified By: Licensee

Item Type: NCV NonCited Violation

**Failure to record the results of post-dive surveys in accordance with procedures**

Technical Specification 5.4.1 requires, in part, that the licensee establish and implement procedures covering the activities recommended in Regulatory Guide 1.33 (Revision 2), Appendix A, February 1978, which include radiation surveys. Procedure NSP-RP-6202 (Revision 0), "Radiological Controls for Contaminated Water Diving Operations," requires that the licensee perform post-dive surveys of the divers for hot particles and document the surveys on the applicable attachment. On October 23 - 31, 2001, the licensee did not consistently document the results of surveys for hot particles on the applicable attachment (or an equivalent form) for post-dive surveys of divers (CR No. 81212). This is being treated as a Non-cited Violation.

Inspection Report# : [2002003\(pdf\)](#)

**Significance:**  Feb 01, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to perform post-dive surveys of divers in accordance with procedures**

During the Fall 2001 refueling outage, the licensee failed to perform post-dive surveys of divers in accordance with the applicable radiation protection procedure. Specifically, the licensee performed the surveys following a rinse of the divers, which had the potential to remove radioactive material that may have been used for future characterization and dose assessment. The inspector identified a Non-Cited Violation of Technical Specification 5.4.1 associated with that failure. The finding was of very low safety significance because underwater surveys of the divers did not identify abnormally high dose rates on the divers' equipment, which resulted in a low potential for the licensee incorrectly assessing the divers' doses.

Inspection Report# : [2002003\(pdf\)](#)

**Significance:**  Dec 29, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

**High Radiation Area Access Controls During Radwaste Shipping Cask Loading**

Failure to properly establish a barricade at the entrance to a high radiation area, as required by procedure. This finding was determined to be of very low safety significance because no individual actually entered an area with high radiation levels, radiological consequences were minimal, and the licensee's ability to assess worker dose was not compromised (2OS1).

Inspection Report# : [2001020\(pdf\)](#)

**Significance:**  Dec 29, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

**High Radiation Area Access Requirements Not Met During Radwaste Shipping Cask Loading.**

Failure to obtain a briefing from the radiation protection staff prior to entry into a posted high radiation area during the loading of a radwaste shipping cask. This finding was determined to be of very low safety significance because no individual actually entered an area with high radiation levels, radiological consequences were minimal, and the licensee's ability to assess worker dose was not compromised (2OS1).

Inspection Report# : [2001020\(pdf\)](#)

**Significance:**  Oct 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to Control HEPA Equipped Portable Vacuum Units as Required by Procedure**

A Non-Cited Violation of Technical Specification 5.4.1 was identified for the failure to control high efficiency particulate air (HEPA) filter equipped portable vacuums to prevent their unauthorized use and tampering, as required by station procedure. This finding included a cross-cutting element as a causal factor related to the effectiveness of the licensee's corrective actions, because similar HEPA vacuum unit control problems were identified and documented by the licensee on several other occasions during 2001(Section 20S2.5). This finding was determined to be of very low safety significance because unauthorized use of the improperly controlled vacuums did not occur; consequently, a substantial potential for an overexposure did not exist relative to vacuum use.

Inspection Report# : [2001019\(pdf\)](#)

**Significance:**  Sep 25, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

**Locked High Radiation Area Access Control Technical Specification and Procedure Violation**

Failure to maintain the entry door to a high radiation area with radiation levels greater than 1000 mrem/hr (Unit-2 High Pressure Heater Bay/X-Area) locked as required by Technical Specification 5.7.2. Additionally, the licensee failed to adequately implement its high radiation area control procedure because: (1) a pre-job brief was not provided to all individuals that entered the area; (2) individuals leaving the area did not challenge the door to ensure it was latched/secured; and (3) radiation protection staff were not contacted upon worker egress from the area to verify proper door closure and latching. Since the inspector concluded that area radiation levels, coupled with the limited duration of the problem before it was licensee identified, precluded a substantial potential for an overexposure, the incident was determined to be of very low safety significance.

Inspection Report# : [2001019\(pdf\)](#)

**Significance:**  Sep 29, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

**Locked High Radiation Area Access Control Violation**

Failure to ensure that an access gate to a locked high radiation area was properly secured and latched upon egress from the area, and failure to designate and document an Access Control Guard, as required by station procedure. This finding was determined to be of very low safety significance because no unauthorized entry into the inadequately secured high radiation area occurred and a substantial potential for an overexposure did not exist (Section 20S1.2).

Inspection Report# : [2000018\(pdf\)](#)

**Significance:**  Jul 14, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

**Inadequate Radiological Survey re. TIP Work**

GREEN. A non-cited violation of the requirements in 10 CFR 20.1501 was identified for failure to evaluate the radiological hazards associated with work on the transversing incore probe (TIP) drive mechanism motor. Although the TIP work was not adequately planned and the radiological hazards were not adequately assessed prior to commencement of work, a substantial potential for an overexposure did not exist and the licensee's ability to assess

dose was not compromised. Consequently, this finding was determined to be of very low safety significance (Section 2OS1.2).

Inspection Report# : [2000012\(pdf\)](#)

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## Public Radiation Safety

**Significance:**  Dec 29, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

### **Inadequate Calibration of the Radwaste Liquid Effluent Radiation Monitor**

Failure to calibrate the radwaste liquid effluent radiation monitor to encompass the entire instrument response range including its alarm function. This finding was determined to be of very low safety significance because proper instrument response and linearity to radiation was determined throughout most of the instrument's required response range, and because the licensee's ability to assess dose to the environment from liquid effluent releases was not impaired by the calibration problem (2PS1.4).

Inspection Report# : [2001020\(pdf\)](#)

**Significance:**  May 15, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

### **Inadequate Emergency Response Telephone Number (Shipment of RadWaste)**

Green. The NRC inspector identified a Non-Cited Violation concerning the failure of the licensee to provide an adequate emergency response telephone number for a shipment of radioactive waste. The designated emergency response telephone number documented on the NRC waste manifest (shipping papers) was not continuously monitored while the shipment was in transit as required by 49 CFR 172.604. The safety significance of this finding was very low because no emergencies occurred while the shipment was in transit; therefore, an emergency responder did not use the emergency response telephone number. In addition, an alternate telephone number was also included within the shipping paperwork that was monitored throughout the shipment.

Inspection Report# : [2001011\(pdf\)](#)

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## Physical Protection

**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.**

Green. 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\(pdf\)](#)

**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.**

Green. A finding of very low safety significance was identified by the inspector. 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:** N/A Jun 15, 2000

Identified By: NRC

Item Type: FIN Finding

**Root cause for performance of protected area security equipment issues was inadequate practices and procedures that involved scheduling and work activities of maint for protected area security equip**

The licensee conducted a comprehensive evaluation for the causes of the conditions that resulted in this performance indicator being an issue of low to moderate safety significance (White). The evaluation identified that the root cause for the performance of protected area security equipment issue was inadequate practices and procedures that involved the scheduling and work activities of maintenance for protected area security equipment. Licensee corrective actions were implemented. Those actions appeared effective to improve security equipment performance in the first quarter of 2000. Overall performance for the indicator remained in the white response band, however, continued effectiveness of corrective actions are expected to turn the indicator green by the third quarter (September) 2000.

Inspection Report# : [2000010\(pdf\)](#)

**Significance:**  Jun 09, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

**A non-cited violation was identified, a supervisor had authorized six personnel unescorted access to two vital areas, their duties did not require access to these areas**

The inspector identified a Non-Cited Violation in that, a licensee supervisor had authorized six personnel unescorted access to two vital areas, even though their duties (work-related need) did not require access to those areas. The failure was caused by human error because the supervisor on two separate occasions failed to take the time to refer to procedural guidance when designating and reviewing vital area access status. Corrective actions were implemented. None of the referenced individuals had actually gained access to the two vital areas.

Inspection Report# : [2000008\(pdf\)](#)

## Miscellaneous

**Significance:** N/A Mar 31, 2002

Identified By: NRC

Item Type: FIN Finding

### **Four Instances Where the Licensee Failed to Identify and Implement Effective Corrective Actions**

The inspectors identified four instances where the licensee failed to promptly identify and correct conditions adverse to quality. In the first instance, during the licensee followup actions for missing lock washers in auxiliary contacts for safety related motor control center cubicles, the licensee failed to prepare supporting operability documentation for an additional 36 safety related components. In the second instance, the isolation condenser experienced a second water hammer after the licensee failed to initiate a condition report after a previous water hammer in August 2001. In the third instance, the licensee failed to promptly identify and correct the condition of missing reactor protection system cable tray covers on Unit 2 which had been identified on September 28, 2001. Finally, following the incorrect connection of a test recorder during undervoltage testing for the Unit 3 emergency diesel generator on September 24, 2000, the licensee failed to identify the full extent of condition and complete previously identified corrective actions (FIN 50-237/249/02-04-07). The individual findings were of very low significance; however, the findings could have had a credible impact on safety or could have been a precursor to a significant event by affecting the availability, reliability, operability or functionality of mitigating equipment (4OA2).

Inspection Report# : [2002004\(pdf\)](#)

**Significance:** N/A Feb 06, 2002

Identified By: NRC

Item Type: FIN Finding

### **A corrective action process, procedures and practices were in place that typically identified and corrected conditions adverse to quality.**

The inspectors concluded that although a corrective action process, procedures and practices were in place that typically identified and corrected conditions adverse to quality, there were a number of examples over the past year of repetitive issues indicative of ineffective corrective actions. Self-revealing issues and issues identified by outside organizations illustrated how improved evaluations were needed to fully resolve problems. The examples raised by the inspectors as findings were the repetitive tripping of station blackout diesel air compressor breakers and debris caught in component cooling service water pumps three times in the past year. These were repetitive issues, captured in the corrective action process and addressed with higher level management attention. Significant issues with ineffective corrective actions were identified in inspection reports during the year. These included Inspection Report 50-237;249/01-21 on a high pressure coolant injection system pressure transient, Inspection Report 50-237;249/01-16 on the 3B reactor building closed cooling water temperature control valve failure, and Inspection Report 50-10/01-01 and 02 on Unit 2/Unit 3 crane certification issues. For problem identification, the licensee used a low threshold for initiating most Condition Reports (CR) which supported a safety conscious work environment. The priorities assigned to issues in accordance with the program were generally appropriate, although in some instances, thorough and aggressive action to address issues was lacking.

Inspection Report# : [2002002\(pdf\)](#)

**Significance:** N/A Jan 18, 2001

Identified By: NRC

Item Type: FIN Finding

### **Corrective action program was functional and typically identified and corrected conditions adverse to quality.**

The inspectors concluded that the corrective action program was functional and typically identified and corrected conditions adverse to quality. In general, the inspectors found that station personnel effectively identified and entered problems into the corrective action program using condition reports. The significance threshold for entering issues into the program appeared appropriate. Planned actions were tracked by computer or were closed to other document systems such as engineering requests or work requests. There were some examples of performance weakness with the

corrective action process. All the examples identified were of very low significance. These included deficiencies which were not documented or for which corrective actions were not completed. Also, in several evaluations of deficiencies, the scope of the review was too narrow, and failed to pursue performance of deficiencies beyond the specific issue documented although broader implications were identifiable. Lastly, while corrective actions were generally effective, there were some long-term equipment issues involving age-related problems or difficult technical issues which had not been fully resolved.

Inspection Report# : [2001004\(pdf\)](#)

**Significance:** N/A Jan 04, 2001

Identified By: NRC

Item Type: FIN Finding

**The inspectors identified human performance errors that affected or had the potential to affect plant operations during this period.**

The inspectors identified human performance errors that affected or had the potential to affect plant operations during this period. These errors represented a continuation of human performance problems across various station departments. The fire marshal failed to determine that the unannounced fire drill had failed. An instrument maintenance technician caused the inadvertent opening of an electromatic relief valve. A Unit 2 scram occurred due to poor configuration control during work on a switchyard breaker. Although each individual issue was low in risk significance, the incidents indicated a performance trend of problems with control, review, and performance of activities. (Section 40A4).

Inspection Report# : [2000021\(pdf\)](#)

**Significance:** N/A Jan 04, 2001

Identified By: NRC

Item Type: FIN Finding

**A contaminated area posting was not properly established**

On November 8, 2000, the inspectors identified that a contaminated area posting was not properly established. The licensee's subsequent corrective actions identified other deficient postings. The licensee's corrective actions were considered inadequate because the inspectors subsequently identified an additional deficient posting. The risk significance of this issue was minimal because there was no spread of contamination during the period the deficient postings existed (40A2)

Inspection Report# : [2000021\(pdf\)](#)

**Significance:** N/A Nov 14, 2000

Identified By: NRC

Item Type: FIN Finding

**Three human performance errors during this period that affected plant operations and safety-related equipment.**

The inspectors identified three human performance errors that affected plant operations during this period. A declining trend in human performance was noted involving errors made by different station departments. Instrument maintenance made several errors during calibration activities on Units 2 and 3. Operators incorrectly generated an out-of-service card for the 3B H2O2 monitor. Maintenance mechanics failed to properly reassemble the 1B main steam isolation valve. Although each individual issue was low in risk significance, the incidents indicated a performance trend of problems with control, review, and performance of maintenance related activities (Section 40A4)

Inspection Report# : [2000016\(pdf\)](#)

**Significance:** N/A Sep 30, 2000

Identified By: NRC

Item Type: FIN Finding

**Recent events and issues were attributed to deficient human performance**

The inspectors identified a number of events that affected operations and safety-related equipment which involved



elements of human performance deficiencies. A failure of an instrument mechanic to remove the correct fuse from the reactor protection bus resulted in the receipt of an unexpected half-scam in the control room (See Section 1R13.1). Engineering personnel's incorrect selection of a 120 VAC contactor coil in the "B" reactor protection system motor-generator set breaker resulted in the motor-generator set failure when placing the equipment back in service (See Section 1R13.2). An incorrect overvoltage coil tap setting on the undervoltage relays on Bus 34 would have resulted in the loss of the 'C' and 'D' containment cooling service water pumps during a loss of offsite power transient (See Section 1R20.1). An engineer performed an inadequate parts evaluation for a piping replacement modification on the high pressure coolant injection system (See Section 1R15). All the events indicated a lack of self-check and/or peer-check. While the risk of the individual events was very low, the number of incidents indicated a performance trend of problems with control, review, and performance of maintenance related activities. (Section 4OA4)

Inspection Report# : [2000013\(pdf\)](#)

Last modified : August 29, 2002