

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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License Nos: DPR-2; DPR-19; DPR-25

Report No: 50-010/96009; 50-237/96009; 50-249/96009

Licensee: Commonwealth Edison Company

Facility: Dresden Nuclear Station Units 1, 2 and 3

Location: Opus West III
1400 Opus Place - Suite 300
Downers Grove, IL 60515

Dates: July 13 through August 30, 1996

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EXECUTIVE SUMMARY

Dresden Nuclear Station Units 1, 2 and 3
NRC Inspection Report 50-10/96009; 50-237/96009; 50-249/96009

This integrated inspection included aspects of licensee operations, maintenance, engineering, and plant support. The report covers the period from July 13 to August 30, 1996, of resident inspection and announced inspections by regional personnel in the areas of security and radiation protection.

Operations

- A violation was identified for Electrical Bus 33-1 undervoltage special test procedure which was not properly reviewed (section 03.1).
- A procedure "posted" in the plant was identified as not being the latest revision. Continued inspector follow up of this condition is planned (section 03.2).
- Assessment of the Technical Specification Upgrade Program (TSUP) (section 03.3) identified that the licensee was ready for implementation; however, all items removed from the old Technical Specifications were not incorporated into appropriate administrative procedures.
- A violation was identified for returning an individual to license duties without properly reactivating the individual's operating license (section 05.1).
- A violation was issued for failing to meet Unit 3 emergency diesel generator operability requirements (section 08.1).

Maintenance

- A violation was issued for failure to follow procedural requirements in calculating specific gravity for the Unit 3, 125 Vdc battery performance test (section M3.1).
- All work was stopped to concerns for worker safety when a potentially lethal shock from a 4kV source was detected. The work stoppage for personnel safety was a conservative response (section M4.1) to personnel safety problems.
- Field observations of on-going work found the licensee and contract staff, with one exception, knowledgeable and following correct procedures (section M4.2).
- A non-cited violation was identified for conducting a surveillance test of secondary containment leakage in a greater than 5 mph wind.

Engineering

- Further evaluation of licensee's use of compression fittings from various vendors is warranted after several examples of mixed fittings were discovered in the facility (section E2.1).
- Followup to AIT Inspection Report 50-249/96008 identified one example of failure to take effective corrective actions for past equipment failures and one non-cited violation for minor procedural deficiencies (section E2.2).
- A non-cited violation was identified for a non-conforming condition regarding the reactor protective system scram pilot solenoid valve indicating lights (section E8.1).

Plant Support

Continued problems were observed regarding Radiation Protection Technician (RPT) performance. During movements of radioactive waste, workers received unplanned intakes of radioactive material due in part to the poor performance of the RPT assigned to the job. One violation was identified as a result of this evolution.

Report Details

Summary of Plant Status

Unit 2 began this report period in cold shutdown as the licensee completed work on 4kV breakers and cubicles. Unit 2 achieved criticality on August 27 and at the end of the report period was commencing power ascension and feedwater testing.

Unit 3 continued in shutdown throughout this report period due to 4kV breaker and cubicle repairs. The licensee also decided to repair the LPCI/containment cooling service water (CCSW) heat exchanger corner room steel and the control rod drive (CRD) gallery steel in parallel with emergent work on the main generator.

I. Operations

01 Conduct of Operations

01.1 General Comments

a. Inspection Scope (71707)

The inspectors observed the day-to-day operation of the plant and attended various licensee Plan-of-the-Day, outage, turnover, and management meetings. Additionally, inspections of control room and plant activities were performed on a shiftly basis during the Unit 2 start up.

b. Observations and Findings

Plant operations were generally conservative and conducted in a professional manner. The licensee was observed to make conservative decisions and to maintain the plant in a safe condition consistent with its license. However, a decline in the quality of control room activities was noted, specifically, use of a special procedure which had not received the correct reviews (section 03.1), occasionally not being attentive to clearing alarms, and minor departures from using standard 3-way communication.

c. Conclusion

The facility was operated in a safe manner. The noted decline in the quality of control room activities was discussed with operations management.

03 Operations Procedures and Documentation

03.1 Review of Electrical Bus 33-1 Special Procedure (SPI-96-07-13)

a. Inspection Scope (71707)

On July 19 the inspectors witnessed parts of the return to service of safety related Bus 33-1 following 4kV breaker maintenance. The inspectors reviewed the following listed documentation and performed direct field observation:

- SPI-96-07-13, "Bus 33-1 Integrated Functional Test," Rev. 0,
- DAP 09-09, "Special Procedures (SP)," Rev. 11,
- UFSAR Section 13.5, "Procedures,"
- UFSAR Section 8.3.1.5, "Standby Diesel Generator System,"
- Technical Specification 3/4.9, "Auxiliary Electric System,"
- Technical Specifications 6.0, "Administrative Controls,"
- DAP 9T-1, "Review Tables," Rev. 5,
- DAP 09-01, "Station Procedures," Rev. 28,
- DAP 09-02, "Procedure and Revision Processing," Rev. 41, and
- DAP 10-01, "Onsite Review/Investigative function and Plant Operations Review committee(PORC)," Rev. 19.

b. Observations and Findings

The inspectors reviewed the special procedure (SP) for Bus 33-1 prior to the licensee executing it. It was noted that the SP did not conform to the requirements DAP 09-09, Rev. 11, Attachment A, in that it did not contain test termination criteria. The inspectors also noted that one "Caution" statement and one "Note" contained action statements, contrary to the guidance of DAP 09-02 Form 09-02C, "Procedure Verification."

The inspectors discussed the noted concerns with the licensee, and while reviewing those concerns, the licensee determined that the procedure had also not received a review by the On-Site Review and Investigation Function (OnSR&IF). The licensee cancelled the scheduled execution of the procedure pending proper review and compliance with the station requirements.

Further review by the inspectors noted that the SP was originally authorized for use on July 11, 1996, and that some setup activities were completed that day. The licensee, therefore, was executing a procedure which had not received all its required reviews. Technical Specification 6.2.A requires, "Written procedures shall be established, implemented, and maintained covering the activities referenced below: 1. The applicable procedures recommended in Appendix A of Regulatory Guide 1.33." The activities listed in Regulatory Guide 1.33 included the procedure review and approval process.

The inspectors noted other recent problems involving SPs, and discussed the issue with licensee management. The licensee reviewed recent potential improvement forms (PIFs) for problems involving SPs and

concluded that there was an adverse trend in the area of special procedures. The licensee had an open investigation into this area with a due date of September 12, 1996.

c. Conclusions

The special test to perform the integrated bus test on Bus 33-1 was not correctly written, nor did it receive the correct reviews prior to implementation. This problem, when viewed with other recent problems, demonstrated the need for increased attention with regard to SP writing and execution.

Failure to follow approved procedures and provide an On-Site review of Special Procedure SPI-96-07-13 prior to the procedure being authorized for work is a Violation (50-249/96009-01) of Technical Specification 6.2.A.

03.2 Procedure Revisions

a. Inspection Scope (71707)

On August 2 the inspectors performed a walk down of Unit 3 control rod drive accumulators using Dresden Operating Procedure (DOP) 300-06, "Charging CRD Accumulators." The inspectors also reviewed:

- DAP 09-13, "Procedure Adherence," Rev. 05,
- DAP 09-09, "Station Procedures," Rev. 28, and
- DAP 09-02, "Procedure and Revision Processing," Rev. 41.

b. Observations and Findings

The procedure found posted at the Unit 3 west side accumulator bank was Revision 12. After walking through the procedure, the inspectors reviewed it with the work execution center (WEC) supervisor and determined that Revision 13, issued on July 29, 1996, had not been updated in the field. The licensee determined that all four postings of the procedure were not the current revision. A followup discussion with a non-licensed operator (NLO) revealed that this had occurred several times recently with other posted procedures, so the NLO wrote a PIF to trend the issue. The inspectors reviewed recent PIFs documenting wrong revisions posted in the field and noted three other instances since June 1996.

DAP 09-13, "Procedure Adherence," Rev. 05, step E.1.c.(2), required procedure users to verify that the procedure was the current revision prior to execution. The posting of an incorrect procedure should be caught before a procedure was executed.

c. Conclusions

The posted field procedure was not current; however, administrative controls contained in DAP 9-13 were intended to prevent an out of date procedural revision from being executed. The control and use of posted

procedures is an Inspector Followup Item which will be reviewed during a future inspection (IFI 50-237; 249/96009-02).

03.3 Assessment of Technical Specification Upgrade Program (TSUP)

a. Inspection Scope (71707)

The inspectors reviewed Section 3/4.5, "Emergency Core Cooling Systems," of the upgraded technical specifications (TS) to determine the licensee's readiness to implement the upgraded TS.

b. Observations and Findings

At the time of the inspection, the upgraded TS were required to be implemented no later than September 26, 1996. The licensee had planned to convert when both units were at least 30 percent power to reduce the potential confusion associated with surveillance testing required during low power operations. Based on delays in the startup schedules for both units, the licensee submitted a request to delay implementation until January 15, 1997. That request was being evaluated by the Office of Nuclear Reactor Regulation and the resolution will be documented under separate correspondence.

The inspectors reviewed the TS amendment request, the NRCs Safety Evaluation, and other related correspondence and determined that Section 3/4.5 of the upgraded TS was written in accordance with those documents. The licensee properly responded to questions and requests for additional information.

Operating and surveillance procedures associated with the upgraded TS were revised to incorporate the new requirements, references, and nomenclature. The procedures were revised in a clear and understandable manner that reflected the upgraded TS. Based on the procedures reviewed, the inspectors concluded that overall, the quality of the procedures was improved during the revision process.

The inspectors reviewed the setpoints and limits in the upgraded TS to determine if the bases for the values were identified in the Updated Final Safety Analysis Report (UFSAR). Only one example was identified where the description in the UFSAR was not clear. The licensee planned to clarify the bases during the next periodic revision of the UFSAR.

The NRCs Safety Evaluation stated that requirements which were removed from the current TS were to be incorporated into administrative procedures. The inspectors determined that there were administrative procedures in place for most of the requirements removed from the current TS. However, several examples were identified where no administrative procedures were in place to implement the requirements:

- Verifying the high pressure cooling injection (HPCI) system discharge piping was full when the suction was aligned to the condensate storage tank (CST).

- Maintaining the low pressure coolant injection and core spray corner room water tight doors operable.
- Maintaining condensate pump room flood protection.

The licensee's corrective actions included modifying an existing surveillance to verify level when the HPCI suction was aligned to the CST and developing administrative procedures that described the corner room water tight doors and condensate pump room flood protection requirements.

The inspectors were concerned that a comprehensive review to determine which requirements were removed from the current TS and how those requirements were being administratively controlled had not been performed by the licensee. There were no aids to assist the operators in determining the location of the new administrative requirements. Based on interviews, it appeared that some licensed operators did not have an appreciation that while a requirement may have been moved from the current TS, the requirement still existed.

The licensee reviewed all of the upgraded TS amendment requests, Safety Evaluations, and other associated documents and identified about 100 items that were either deleted altogether or incorporated into administrative procedures. The licensee planned to develop a matrix that identified the new location of requirements and to include the matrix in the licensed operator training program. Additionally, the matrix was added to the operators' required reading to be completed prior to implementing the upgraded TS.

The Safety Evaluation also required that the UFSAR be revised to reflect the movement of requirements from the current TS to administrative procedures. The licensee planned to use the "matrix" identified above to ensure the next periodic revision of the UFSAR contained appropriate references.

c. Conclusions

Based on the review of Section 3/4.5, the inspectors concluded that the licensee was adequately prepared to implement the upgraded TS. Some requirements that were removed from the current TS had not been incorporated into administrative procedures and the new location of some of the requirements was not readily understood. Additionally, it appeared that some licensed operators did not fully appreciate that relocating a requirement from the current TS had not diluted the requirement.

05 Operator Training and Qualification

05.1 Condition of Operator Licenses

a. Inspection Scope (71707)

On August 13 an inspection of operations records was conducted. The purpose of the inspection was to determine the licensing status of all licensed individuals performing a rotational work assignment at the Institute of Nuclear Power Operations (INPO), as well as for individuals temporarily reassigned out of operations to the work control center. Also, interviews were conducted with training and operations personnel concerning all rotations away from licensed duties.

b. Observations and Findings

Three senior reactor operators (SROs) had been assigned to INPO from July, 1993 to March, 1996 for rotations varying from five to seven months. All three individuals were removed from licensed duties and did not participate in the facility's requalification training program for the duration of the rotation. Each operator satisfactorily completed an NRC approved program for accelerated training prior to subsequent performance of licensed duties. However, two operators did not have their licenses formally amended to indicate that they were not to perform licensed duties until accelerated training and re-enrollment in the facility's requalification training program was achieved. In addition, the one operator whose license was amended returned to licensed duties prior to his license being formally re-activated. 10 CFR 50.54(i) states, in part, that the licensee may not permit the manipulation of the controls of any facility by anyone who is not a licensed operator or senior operator as provided in part 55 of this chapter. Failure of the licensee to re-activate the license of an operator prior to returning that individual to duty is a Violation (50-249/96009-03).

Five SROs were removed from requalification training at various times from November 1995 through June 1996, to participate in outage preparation activities. The licensee submitted letters for three of the SROs stating that the individuals were no longer on shift and would meet the requirements of 10 CFR 55.53 and the licensees' program of accelerated training for return to active license status. The licensee acknowledged that any time a licensed individual was removed from the requalification program for off site rotation, reassignment, or special assignments, a license amendment or license termination should occur, depending on the circumstances.

c. Conclusions

The licensee's program for accelerated training for licensed operators whose licenses had been amended was considered satisfactory. However, the licensee exhibited a weakness in the understanding of administrative actions necessary prior to returning an amended license to active status.

04 Operator Knowledge and Performance

04.1 Operators Performance During Execution of Surveillance and Abnormal Procedures

a. Inspection Scope (71707)

On July 15 the inspectors observed Dresden Operability Surveillance (DOS) 6600-01, "Diesel Generator Surveillance Tests," Rev. 38, for the Unit 3 Emergency Diesel Generator (EDG). The inspectors observed all in-field portions of the procedure up to and including loading the EDG.

During the night of July 17 and 18 the area received record-breaking (15-inch) rainfall which resulted in flooding. The inspectors reviewed the licensee's response and compared it to Dresden Operating Abnormal (DOA) procedure 0010-04, "Floods," Rev. 07 and the Emergency Plan Implementing Procedures (EPIPs).

b. Observations and Findings

The inspectors observed that the operators performing the Unit 3 EDG operability surveillance were following the procedure and had the most recent revision available. When uncertain about the location of a piece of test equipment, the operators contacted the Field Supervisor for guidance prior to continuing the surveillance. This demonstrated a careful approach to performing the procedure.

The licensee entered DOA 0010-04 for flooding when the Kankakee River level at the cribhouse measured 506.0 ft. This was in accordance with the DOA entry requirement of 506.0 ft. The licensee determined that no emergency classification was required. Additionally, the licensee was actively looking for rainwater leaks into the facility.

c. Conclusions

Operations personnel appeared to be questioning and deliberate while performing both the EDG surveillance and the DOA for flooding; however, work scope expansion on Bus 34-1 4kV breaker work combined with the Unit 3 EDG being on the last day of the TS surveillance interval resulted in both the Unit 3 and the Unit 2/3 EDGs being declared inoperable concurrently for several hours during the Unit 3 EDG operability surveillance. This issue is discussed separately in paragraph 08.1 below.

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c. Conclusions

The licensee's program for accelerated training for licensed operators whose licenses had been amended was considered satisfactory. However, the licensee exhibited a weakness in the understanding of administrative actions necessary prior to returning an amended license to active status.

06 Operations Organization and Administration

On August 12 the licensee announced that the current Shift Operations Supervisor (SOS) was transferred to engineering. A former Shift Manager was selected as the new SOS.

08 Miscellaneous Operations Issues (92701)

08.1 (Open) Licensee Event Report (LER) 50-249/96-009 Revision 0: Licensee Forced into Noncompliance with Technical Specification 3.9.D to Complete Diesel Generator Operability Run due to Work Management Process Deficiency. Dresden Technical Specification 3.9.D requires, in part, that whenever the reactor is in Cold Shutdown, a diesel generator shall be operable whenever a core or containment cooling subsystem is required. Contrary to the above, on July 15 with the Unit 2/3 EDG inoperable due to work on Bus 33-1, the Unit 3 EDG was made "inoperable" during a required surveillance test discussed in paragraph 04 above. The Unit 3 EDG was declared operable following successful completion of the surveillance test about 4 hours later. The failure to maintain at least one operable EDG for Unit 3 in cold shutdown is a Violation of Technical Specification 3.9.D (50-237;249/96009-04). The root cause for this violation and the licensee's corrective actions were discussed in the subject LER. Therefore, no additional response to the Violation is required.

08.2 (Closed) IFI 50-237/96006-03: Loss of Annunciators. On June 28, 1996, Unit 2 lost main control annunciator panels 902-3, 4, 5, 6, 7, 8, and 923-5 due to a fault on Line 1207. The cause for the loss of annunciators was improper electrical separation between Line 1207 static lines and the station ground grid. The licensee installed insulators to provide the needed separation. The corrective action was more aggressive than the response to a similar event which occurred in January 1994, when the cause was attributed to a bad power supply. Based on the new corrective action this item is closed.

08.4 (Closed) Licensee Event Report 50-237/96-012: Inadvertent Start of the 2/3 Diesel Generator due to Personnel Error. On July 20 a nuclear station operator (NSO) attempting to shut down the Unit 2/3 EDG, inadvertently placed the control switch to START twice when he should have placed the switch to AUTO. The NSO recognized each time that the expected response did not occur, then correctly manipulated the switch on a third attempt. The NSO's actions resulted in the auto closure of the field breaker by the EDG start logic. Since the NSO did not realize the reflash of the EDG field (i.e. closure of the field breaker) might be "reportable," the error was not immediately reported. On July 29 the NSO became concerned that the switch manipulations may have impacted the EDG and the event was reported to management. The NSO involved had previously failed to self-check prior to taking action, resulting in an inadvertent scram signal (ref. LER 50-237/96-006). The licensee placed the NSO under close monitoring and training to emphasize self-checking prior to returning him to shift. Corrective actions appeared reasonable to prevent recurrence and this item is closed.

II. Maintenance

M3 Maintenance Procedures and Documentation

M3.1 125 Volt-DC Main Station Battery Modified Performance Test (Unit 3)

a. Inspection Scope (61726)

The inspectors reviewed Dresden Electrical Surveillance (DES) 8300-19, "Unit 3 125 Volt-DC Main Station Battery Modified Performance Test." Upon completion of the procedure review, discussions were conducted with maintenance personnel, the system engineer, and cognizant licensee management personnel.

b. Observations and Findings

Previous NRC inspection activities identified numerous errors in the documentation of battery surveillance, service, and performance testing which were documented in NRC Inspection Report 50-237(249)/96004, section E4.2. During the inspectors review of the most recent performance test completed on July 3 several deficiencies were identified including:

- The surveillance contained several calculation errors in the correction of specific gravity for cell electrolyte level and in the determination of the battery average specific gravity (errors did not affect the "operability" of the battery). These errors were not identified by the licensee during the independent verification of the calculations nor during the surveillance review process. Additionally, subsequent inspection of the requirements of the procedural guidance regarding independent verification revealed that DAP 07-27, "Independent Verifications," Revision 11, did not contain any guidance with respect to performing independent verification of calculations.
- The inspectors reviewed the licensee's corrective actions for similar, previously identified deficiencies which were documented in PIF 96-07234. The corrective actions included a detailed review of previously completed battery surveillance tests and "Attention to Detail" training to the plant engineering staff. The inspectors found the licensee's corrective actions to be narrow in scope and ineffective in preventing the recurrence of these deficiencies. Specifically, there were no corrective actions identified for the work group directly responsible for the performance of the surveillance tests and the independent verification of the calculations (electrical maintenance department). In addition, the training provided to the plant engineering staff was not sufficient to cause the engineering staff to identify subsequent calculational deficiencies during review of completed surveillance tests.

- During completion of the 74-hour equalizer battery charge, conducted in accordance with the Unit 3 125 Volt-DC Main Station Battery Modified Performance Test, DES 8300-19, Step I.46, the licensee failed to record individual cell voltages and check for voltage stabilization during hours 68 through 71 as required. As a result, the following day the licensee returned the battery to an equalize charge to verify satisfactory completion of the charge. However, the licensee failed to initiate a PIF which was required by DAP 02-27, "The Integrated Reporting Process," Revision 5, for inadequate procedure usage.

In response to the identification of the above concerns, the licensee initiated a level 3 PIF to evaluate the deficiencies, determine the root causes and implement appropriate corrective actions to prevent their recurrence.

10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires in part that measures be established to assure that conditions adverse to quality, such as deficiencies and non-conformance are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure corrective action to preclude repetition. Corrective actions for similar deficiencies, previously identified by the NRC and documented in licensee PIF 96-7234, were narrow in scope and were not effective in preventing the recurrence of the deficiencies and, therefore, is a violation of 10 CFR Part 50, Appendix B, Criterion XVI (50-237;249/96009-05A).

c. Conclusions

The inspectors identified a recurring deficiency in the performance of calculations associated with battery surveillance testing including the failure of the independent verification process to identify and correct these deficiencies. While these deficiencies did not affect the operability of the 125 Volt-DC battery, the differences indicated a lack of rigor and sensitivity associated with the independent verification and the surveillance review process.

M4 Maintenance Staff Knowledge and Performance

M4.1 Safe Work Practices

a. Inspection Scope (62707)

The licensee stopped all maintenance work on July 25 due to concerns for worker safety. The event which prompted the work stoppage involved an electrical shock from a 4kV source. The inspectors' document reviews included:

- ComEd Generations Stations Safety Rule Book,
- PIFs related to personal injuries, and
- Out-Of-Service (OOS) 960008507, "Bus 34 4kV Inspect and Refurbish Breakers and Cubicles."

In addition, interviews were conducted with cognizant individuals.

b. Observations and Findings

On July 25 an electrical maintenance department (EMD) supervisor sustained minor injuries while inspecting 4kV Bus 34, Cubicle 11, "Reserve Feed From Reserve Auxiliary Transformer 32," for foreign material. The supervisor lifted up the safety shields (shutters) covering the 4kV feed (stabs) in the back of Cubicle 11, when an electric arc (apparently attracted by a hand held rag) burned his hand. The burn was minor and only at the fingertips; however, the potential for a more severe injury was significant.

A review of OOS 960008507 showed that Bus 34 was de-energized using DOP 00-27 "Removing 4kV Bus 34-1 from Operation for Maintenance (W1)" Rev. 6. The OOS did not state that the feed to Cubicle 11 was de-energized. Section G127.01.1 of the safety rule book stated, "Always treat electrical equipment as energized until approved testing methods prove that it is de-energized." This had not been done for the stabs behind the shutters. The involved supervisor was unaware that any part of the 4kV electrical bus was energized.

Other recent personnel safety injuries included two EMD workers who received burns while working on the Administration Building air conditioner, and a contractor working on 4kV breaker refurbishment had a trip latch mechanism close on the individual's hand. A review of personal-injury related PIFs for 1996 did not reveal any area where most injuries were concentrated. However, several PIFs documenting injuries associated with breaker work were identified.

The licensee's reaction to the event was thorough. All work except for Technical Specification and regulatory-related activities was stopped for five days. Safety training was provided to all station personnel and management emphasizing safety to all workers.

Field observations and discussions revealed that the worker awareness of safety was raised. However, even after the safety work stoppage, the inspectors continued to note instances of workers not wearing hardhats or safety glasses while in the work area.

c. Conclusions

The work stoppage for safety was a conservative response to significant personnel safety event. However, it was too soon to fully assess the effectiveness of the licensee's corrective actions.

M4.2 Performance in the Field

a. Inspection Scope (62707)

The inspectors conducted field observations of on-going work. This included reviews of work packages and interviews with licensee and contractor staff. A comparison of the observed practices with the requirements of DAP 15-06, "Preparation, Approval, and Control of

Packages and Work Requests," Rev. 08, was then performed. Work Requests (WR) reviewed and work observed included:

WR 960055801	D2 QTR TS Rod Block Monitor Calibration.
WR 960072418	Troubleshoot and Repair RBM 8.
WR 960069589	D3 1M TS Core Spray MO Valve Operability.
WR 960060882	Valve Wrench Is Required To Open/Close Valve (HCU 42-51 ACCUM DRN VLV).
WR 950020902	Perform MMD Surveillance (2B Pump Back Compressor).
WR 950060975	3A LPCI HT EXCH. Disassemble, Clean, Inspect, Test & Assembly.
WR 960061169	Compressor Failed-Flywheel Bolts Loose, TBCCW Line Sheared (3A Instrument Air Compressor).
WR 960030680	Reinforce Structural Steel Per E12-3-95-259 (Corner Room Steel).
WR 960077908	Adjust Limits To Open Valve More (U3 CNMT CLR HX A TUBE SIDE DISCH MOV).
WR 960028087	Reinforce D3 CRD-SDV Galleries Per EC E12-3-96-201.

b. Observations and Findings

In general, the licensee and contract staff performing maintenance were knowledgeable and followed correct procedures and practices.

The inspectors found one exception, on August 16, when staff were installing the non-safety related 3A Instrument Air Compressor (IAC) in the field using a procedure marked up for removal of the compressor. This was discussed with the workers in the field, although work did not stop. After discussions with the field supervisor, correct work directions were provided. DAP 15-06 F.8.b.(3) required a copy of applicable procedures for the work being performed. On August 19 a Site Quality Verification (SQV) auditor identified that the same job was being executed under the wrong work request to remove the compressor. The licensee had an open Level 3 root cause investigation due September 25, 1996, regarding the IAC work.

c. Conclusions

Attention to detail has been a long-standing issue at the facility especially regarding maintenance. Failure to ensure proper documentation in the field for work on a major piece of equipment demonstrated a continuing problem in this area.

M8 Miscellaneous Maintenance Issues (92902)

M8.1 Repetitive Local Leak Rate Test Failures of High Pressure Coolant Injection (HPCI) System Turbine Exhaust Check Valves

a. Inspection Scope

The following documents were reviewed:
LER 50-249/89009 Local Leak Rate Testing "As Found" Limit Exceeded Due

LER 50-249/91007	to Excessive Leakage From Primary Containment Valves Type B and C Containment Local Leak Rate Testing Limit Exceeded Due to HPCI Turbine Exhaust Check Valve Leakage
LER 50-237/94022	Type B and C Leakage Limit Exceeded Due to Worn Seating Surface of HPCI Check Valve
LER 50-237/95018	Type B and C Leakage Limit Exceeded Due to Excessive Leakage Past HPCI Check Valve
LER 50-249/95011	Type B and C Leakage Limit Exceeded Due to Excessive Leakage Past HPCI Check Valve
Dresden Technical	Surveillance 1600-01, "Local Leak Rate Testing of Primary Containment Isolation Valves"
Dresden Operating	Surveillance (DOS) 2300-03, "High Pressure Coolant Injection (HPCI) Operability Verification"

b. Observations and Findings

Unit 3 HPCI system turbine exhaust valve 3-2301-45 failed local leak rate testing (LLRT) three times since 1989. In addition, Unit 2 HPCI turbine exhaust valve 2-2301-45 had two failures during the same time period. In 1991, the root cause was identified as check valve cycling at low turbine speeds which occurred during normal testing, and in 1993, DOS 2300-03, "High Pressure Coolant Injection (HPCI) Operability Verification," was revised to eliminate lengthy low speed turbine operation. The licensee replaced the check valve closing springs with weaker springs in 1994 to allow the check valve to fully open during low speed turbine operation. In 1995, the cause for the LLRT failure of both HPCI system turbine exhaust check valves was found to be failure to fully close under test conditions due to the weaker closing springs. The original closing springs were reinstalled in both units, and both valves were successfully retested. Since 1995 both valves were tested at the increased frequency discussed in LER 50-237/94022, and no further failures have been noted.

c. Conclusions

The licensee was monitoring the performance of the HPCI turbine exhaust check valves at an increased frequency. The corrective actions discussed above appeared reasonable to prevent recurrence, and the inspectors have no further concerns; therefore, the LERs discussed below in paragraphs M8.2 through M8.4.

- M8.2 (Closed) Licensee Event Report 50-237/94022 Revision 0 and Revision 1:
Type B and C Leakage Limit Exceeded Due to Worn Seating Surface of HPCI Check Valve. The corrective actions for this LER were discussed above and appeared adequate to prevent recurrence. This LER is closed.
- M8.3 (Closed) Licensee Event Report 50-237/95018 Revision 0 and Revision 1:
Type B and C Leakage Limit Exceeded Due to Excessive Leakage Past HPCI Check Valve. The corrective actions for this LER were discussed above and appeared adequate to prevent recurrence. This LER is closed.

- M8.4 (Closed) Licensee Event Report 50-249/95011 Revision 0, Revision 1, and Revision 2: Type B and C Leakage Limit Exceeded Due to Excessive Leakage Past HPCI Check Valve. The corrective actions for this LER were discussed above and appeared adequate to prevent recurrence. This LER is closed; however, Unresolved Item 50-249/95010-02, which refers to the safety significance of total containment leakage, remains open pending further review as documented in Inspection Report 50-237;249/96006 paragraph 08.5.
- M8.5 (Closed) Licensee Event Report 50-237/94031 Revision 0: Type A Administrative Limit Exceeded Due to Leaking HPCI Primary Containment Isolation Check Valve 2-2301-34. The check valve was repaired, and an increased surveillance schedule was implemented. The corrective actions documented in the LER have been completed and appear adequate to prevent recurrence. This LER is closed.
- M8.6 (Closed) Unresolved Item (Report No. 50-237;249/95008-03): Failure to Maintain Secondary Containment. Dresden Technical Surveillance (DTS) 1600-22, "Secondary Containment Leak Rate Test," was revised to require entering Technical Specification (TS) 3.7.C Limiting Condition for Operation (LCO) whenever 0.25 inches of water vacuum cannot be maintained in secondary containment with the Standby Gas Treatment System. Additionally, this revision added the missing door configurations to the testing requirements. A revision to DAP 13-14, "Unit 3 Reactor Building Material Interlock Door Access Control," added the requirement to enter TS 3.7.C LCO whenever the Recirculation Pipe Replacement (RPR) material interlock inner door was opened, and a placard was placed on the RPR material interlock inner door to remind personnel of the requirement. No TS violations actually occurred because the RPR material interlock inner door was never opened for longer than four hours; however, personnel using the door were not made aware of the TS requirement and could have caused a violation. This issue was also reported in LER 50-249/95012 which is discussed in paragraph M8.7 below. The corrective actions discussed above appeared adequate to prevent recurrence, and the inspectors have no further concerns. This item is closed.
- M8.7 (Closed) Licensee Event Report 50-249/95012 Revision 0 and Revision 1: Degraded Secondary Containment Condition Observed During Testing Due to Procedure Deficiency and Personnel Error. On May 31, 1995, the licensee determined that secondary containment was not maintained during the performance of DTS 1600-22, "Secondary Containment Leak Rate Test." In addition to the corrective actions discussed in paragraph M8.6 above, a licensee review of surveillance tests conducted between August 26, 1994 and March 10, 1995, determined that DTS 1600-22 was routinely performed with wind speeds greater than 5 mph. Technical Specification 4.7 required, in part, that secondary containment surveillance shall be performed under calm wind (less than 5 mph) conditions. The corrective actions documented in the LER have been completed and appeared adequate to prevent recurrence. This licensee-identified and corrected violation is being treated as a Non-Cited Violation (50-237;249/50-96009-06), consistent with Section VII.B.1 of the NRC Enforcement Policy. This LER is closed.

III. Engineering

E2 Engineering Support of Facilities and Equipment

E2.1 Compression Fittings

a. Inspection Scope (37551)

The inspectors reviewed the licensee's evaluation of the installation of compression fittings with interchanged hardware from different manufacturers.

b. Observations and Findings

On July 24 during a plant tour the inspectors identified several safety related systems with instrument compression fittings containing hardware from different manufacturers i.e., Swagelok and Parker-Hannifan. In response to the inspectors' concerns the licensee initiated a Level 3 PIF.

This issue was previously identified in Information Notice (IN) 92-15, "Failure of Primary System Compression Fittings," dated February 24, 1992. IN 92-15 identified a number of problems associated with the installation of compression fittings including interchanging hardware from different manufacturers and that licensee procedures for installation of compression fittings may not provide adequate guidance to avoid improper assembly of these fittings. The licensee's evaluation of IN 92-15, completed June 25, 1992, was not adequate to identify and correct similar problems at Dresden.

The licensee considered the assembly of compression fittings, "skill of the craft." As a result, the licensee relied upon the training program to provide the necessary guidance to maintenance personnel to ensure the proper assembly of compression fittings. Subsequent inspection revealed that the instrument and mechanical maintenance departments received training during initial qualification and that the electrical maintenance department was not receiving training on the proper installation of these fittings; however, all maintenance departments were responsible for the assembly of these fittings.

The inspectors concluded, through review of the training curriculum, that the licensee's training was not following all vendor recommended practices and was not adequate to ensure proper installation of these fittings. Specifically, the maintenance staff was not being trained on the use of gap checks to ensure sufficient pull-up and the staff was not being trained on interchanging hardware from different manufacturers.

In response to the inspectors' concerns, the licensee indicated that the practice of interchanging hardware was acceptable based on the results of Parts Evaluation M-1995-559-0.

The inspectors' review of this evaluation identified the following concerns which were identified to the licensee:

- There was no documentation of the results of the leak test for certain test configurations.
- There was no documented basis for concluding one test was successful even though it leaked following assembly per the test instructions.
- There was no justification for extrapolation of the test data.
- There was no documented basis for the statistical validity of the test data.
- Field conditions were not incorporated into the testing.
- The testing did not meet interchangeability testing recommended by Swagelok.

The subject of mixed instrument compression fittings is considered an Unresolved Item (50-237;249/96009-07) pending the inspectors' review of the licensee's justification for the adequacy of the test program utilized to demonstrate the acceptability of interchanging compression fitting hardware from different manufacturers.

c. Conclusions

Mixed instrument compression fittings were found in the field for which the engineering basis for acceptability was not readily available or understandable.

E2.2 AIT Findings

a. Inspection Scope (92701)

In accordance with NRC Inspection Procedure 93800, "Augmented Inspection Team Implementing Procedure," the results of Inspection Report 50-249/96008, dated June 14, 1996, were evaluated to determine if NRC rules and/or regulations were violated.

b. Observations and Findings

On May 15, 1996, the failure of the 3B feedwater regulating valve resulted in a complete loss of feedwater to the reactor. The reactor automatically tripped and emergency systems, including the high pressure coolant injection (HPCI) system and a Group 1 primary containment isolation, actuated as designed. When the Group 1 signal was reset, an inboard main steam isolation valve (MSIV) and a reactor recirculation sample isolation valve (220-45) unexpectedly opened. Following the initial review of the transient, the NRC formed an AIT to examine the circumstances surrounding the event.

Inadequate Corrective Actions for Previously Identified Relay Failure

The unexpected opening of the two primary containment isolation valves resulted from a failed HGA relay in each of the valves' seal-in logic control circuit. The relays, General Electric Model Number 12HGA17S63, were mechanically bound due to an interference fit of the phenolic block at the armature support bracket pivot points.

The licensee's corrective actions included placing "Caution tags" on each unit's Group 1 Main Steam Isolation Reset switches with instructions to manually close all Group 1 isolation valves prior to resetting a Group 1 signal. The inspectors reviewed the electrical schematics for all Unit 2 (U-2) and U-3 Group 1 valves and concluded that these actions would prevent spurious opening of the valves if other Group 1 seal-in relays were mechanically bound.

Additionally, the licensee "dedicated" twelve HGA relays to be reinstalled in U-3. The inspectors reviewed the relay "dedication" package and post maintenance verification tests and concluded that the relays and the contacts operated satisfactorily. Other corrective actions included issuance of an industry wide notification letter of the relay failures in May, issuance of a 10 CFR Part 21 notification in June, and testing and replacement of the U-2 HGA relays in July 1996.

Based on reviews of the maintenance history of the relays, the inspectors concluded that three U-2 corrective work requests (WRs) (two in 1994 and one in 1995) were indicators of potential relay binding problems that subsequently effected the U-3 HGA relays. The inspectors determined that the WRs: (1) had focused primarily on the MSIV indicating lights rather than the safety related function of the relay, (2) lacked sufficient detail to determine what corrective work was performed and that all contacts of the repaired or replaced relays had been thoroughly tested, and (3) were not adequately evaluated to determine if a generic problem existed. While the three failures were precursors to the May 1996 event, the component trending program in place was insufficient to identify potential common mode failures.

Criterion XVI to 10 CFR Part 50, Appendix B, "Corrective Action," requires, in part, that measures be established to assure that conditions adverse to quality, such as deficiencies and non-conformance, are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure corrective action taken to preclude repetition. Corrective actions in response to the previously identified HGA relay failures were not effective in preventing the failures of two HGA relays on U-3 in May 1996, a condition adverse to quality. The result of the ineffective corrective action was the unexpected opening of the two primary containment isolation valves. Failure to take effective corrective actions is an example of a Violation of 10 CFR Part 50, Appendix B, Criterion XVI (50-237;249/96009-05B).

The inspectors determined that the information regarding the reason for this violation, the corrective actions taken to correct the violation and prevent recurrence, and the date when full compliance was achieved as described in Licensee Event Report 50-249/96-004-00 and in AIT report 50-249/96008 were adequate. Therefore no additional response to the violation is required.

Inadequate Procedures

The inspector's identified minor discrepancies in four procedures that were used during the May 15, 1996, loss of feedwater event.

- Dresden Annunciator Procedure (DAN) 903-5 D-4, "GROUP 1 ISOLATION INITIATED," Revision 5: Procedure DAN 903-5 D-4 was unclear in that there was no specific step to reset a Group 1 isolation signal. The licensee revised the DAN on May 22, 1996, to correct the deficiency.
- Dresden General Procedure (DGP) 02-03, "Reactor Scram Procedure," Revision 24: After the reactor trip, two control rods did not indicate "00" on the full core display. The nuclear station operators used the Rod Worth Minimizer (RWM) to verify that one control rod was fully inserted after the scram. Step D.2 of the scram procedure stated to check that all rods were inserted using OD-7 or the full core display. The RWM was not mentioned in the procedure. However, use of the RWM was consistent with the guidance in the licensee's training. The inspectors concluded that the use of the RWM was acceptable. The licensee revised the procedure to incorporate the use of the RWM for verification of rod positions.
- Dresden Operating Procedure (DOP) 2300-04, "HPCI System Shutdown," Revision 5: The steps in DOP 2300-04 were inadequate to correctly realign the HPCI auxiliary cooling water subsystem. By performing the steps in DOP 2300-04, the auxiliary cooling pump's flow path was isolated. The licensee revised the procedure to include the correct valve line up.
- DAN 902(3)-3 A-10, "HPCI THRUST BRG WEAR ACTIVE FACE," Revision 3: During the HPCI start, the HPCI Thrust Bearing Wear Alarm momentarily actuated. The DAN stated that the probable causes for this alarm were thrust bearing failure, abnormal shaft movement, or switch failure. Additionally, this alarm indicated abnormal turbine rotor movement and may indicate impending turbine failure. The licensee determined that this was an expected alarm for sudden HPCI start. The licensee revised the DAN.

Dresden Technical Specification (TS) 6.2.A required, in part, that written procedures shall be established and maintained covering the activities referenced in Appendix A to Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)," Revision 2, February 1978. Procedures used to maintain containment integrity, to operate the HPCI

system, and to recover from a reactor trip, were referenced in Appendix A to Regulatory Guide 1.33. Failure to maintain adequate procedures regarding containment integrity, to operate the HPCI system, and to recover from a reactor trip is a Violation of TS 6.2.A (50-237;249/96009-08). This licensee identified and corrected violation is being treated as a Non-Cited Violation, consistent with Section VII.B.1 of the NRC Enforcement Policy.

c. Conclusions

As previously described in the AIT report, the inspectors determined that there were several missed opportunities to identify the HGA relay binding problem prior to the May 1996 failure. Failure to take effective corrective actions resulted in the unexpected opening of the two primary containment isolation valves. Additionally, the inspectors concluded that the procedural deficiencies had not prevented the operators from placing the plant in a safe condition.

E2.3 UFSAR Discrepancies

a. Inspection Scope (71707)

The inspectors used the updated final safety analysis report (UFSAR) as a technical reference for the following sections of this report and compared the actual plant operation to the descriptions contained in the UFSAR:

03.3 Assessment of Technical Specification Upgrade Program (TSUP)

E8.1 Design Control, Corrective Action, and Reporting Deficiencies

E8.2 Operability of Unit 3 Low Pressure Emergency Core Cooling Systems Due to the Corner Room Structural Steel Nonconforming Condition.

E8.3 Containment Electrical Penetrations Contained in the Shutdown Cooling Pump Rooms

b. Observations and Findings

The bases for the setpoints and limits in the updated technical specifications were compared to the UFSAR. One example was identified where the description in the UFSAR was not clear. The licensee planned to clarify the upgraded technical specification bases during the next periodic revision of the UFSAR (section 03.3).

The configuration of current limiting isolation resistors for the scram pilot valve solenoid indicating lights in the control room back panels was contrary to General Electric Design Specification 22A2501 "Separation Requirements For Reactor Safety and Engineered Safeguards Systems," dated January 28, 1969. This was a nonconforming condition to the UFSAR section 7.2 which the licensee failed to recognize (section E8.1).

The structural steel members in the corner rooms were outside the UFSAR design parameters, but remained capable of performing the intended safety function. Amendment No. 144 to Facility Operating License No. DPR-25 authorized, on a one-time temporary basis, operation of Unit 3, with the structural steel members in the corner rooms outside the UFSAR design parameters, but capable of performing the intended safety function (section E8.2).

The temperature of the electrical penetrations in the shutdown cooling pump room exceeded the limits shown in UFSAR, Table 3.8-3. The licensee reviewed the environmental qualification of the shutdown cooling pump room electrical penetrations and determined that the components were qualified for continuous operation at 150°F for a 40 year life (section E8.3).

c. Conclusions

The above examples show that some discrepancies between plant operation and the UFSAR exist; however, the license amendment and UFSAR change submittals demonstrate that the licensee was taking prompt actions to resolve identified discrepancies.

E8 Miscellaneous Engineering Issues (92903)

- E8.1 (Open) Violations 50-237;249/96005-02a and b, 03a and b, and 04a and b: Design Control, Corrective Action, and Reporting Deficiencies With Respect to Corner Room Structural Steel and Reactor Protection System (RPS) Single Failure Vulnerability. An enforcement conference was held on May 1, 1996 and a Notice of Violation (NOV) and Imposition of Civil Penalty was issued on June 13, 1996, for the structural steel example. The licensee provided additional information during the conference regarding design basis, safety significance, and a detailed chronology. From this information, the NRC staff concluded a similar level of enforcement action was not appropriate for the RPS example.

However, the NRC staff concluded from additional information (detailed in Report 50-237;249/96007) that a minor violation of 10 CFR 50.59(b)(1) had occurred with respect to the RPS issue. Specifically, the licensee recognized that the configuration of current limiting isolation resistors for the scram pilot valve solenoid indicating lights in the control room back panels was contrary to General Electric Design Specification 22A2501 "Separation Requirements For Reactor Safety and Engineered Safeguards Systems," dated January 28, 1969. Although the opportunity existed since 1994, the licensee failed to recognize this as a nonconforming condition to the Updated Final Safety Analysis Report (UFSAR) Section 7.2. Therefore, the licensee did not provide a written safety evaluation for this facility change and did not resolve the nonconforming condition in a timely manner. This failure constitutes a violation of minor significance and is being treated as a Non-Cited Violation (50-237;249/96009-09), consistent with Section IV of the NRC Enforcement Policy.

The licensee subsequently performed modifications to correct the RPS design deficiency. Extensive corrective actions to address timely resolution of nonconforming conditions were described in the licensee's response, dated July 12, 1996, to the structural steel NOV and in Inspection Report 50-237;249/96007. These items are remaining open pending inspection of licensee implementation of corrective actions described in the NOV response.

- E8.2 (Closed) Unresolved Item 50-249/96005-01: Evaluate Operability of Unit 3 Low Pressure Emergency Core Cooling Systems Due to the Corner Room Structural Steel Nonconforming Condition. Numerous discussions were conducted with the licensee and additional analyses were performed to resolve this concern. Amendment No. 144 to Facility Operating License No. DPR-25 authorized, on a one-time temporary basis, operation of Unit 3, with the structural steel members in the corner rooms outside the UFSAR design parameters, but capable of performing the intended safety function. Therefore, the inspectors have no further concerns in this area and this item is closed.
- E8.3 (Open) Unresolved Item 50-237;249/96006-11: Containment Electrical Penetrations Contained in the Shutdown Cooling Pump Rooms Exceeded the Temperature Limit of 125°F Specified in the UFSAR, Table 3.8-3. The licensee reviewed the environmental qualification of these penetrations and concluded that the penetrations were qualified for continuous operation at 150°F for a 40 year life. The inspectors had no further concerns with this aspect of the unresolved item; however, all other aspects of the item remain open pending NRC review of the licensee's evaluation of the conditions.

IV. Plant Support

R1 Radiation Protection and Chemistry (RP&C) Controls

R1.1 Review of Unplanned Radiological Intakes of Radioactivity to Workers During Radioactive Waste Area Cleaning

a. Inspection Scope (83750)

The inspectors reviewed the circumstances surrounding the unplanned intakes of radioactive material received by workers during an ongoing cleanup effort in the radioactive waste storage area.

b. Observations and Findings

During the day shift on July 8, 1996, a pre-job briefing was conducted for work to be performed in the radioactive waste storage bay area. The specific task reviewed was to shield a high integrity container (HIC) liner which was to be used for the disposal of control rod drive filters.

The work crew entered the area and the accompanying radiation protection technician (RPT) noted that a water shield was already in the area and

decided that the previously planned shielding was not needed. Having this task complete the crew was instructed to continue with the job of removing the CRD filters from an old storage HIC to the new one. During the removal of this material, the workers identified a bag which contained a vacuum cleaner which exhibited contact dose rates of 12 rem/hr. Bags of assorted irradiated metals from CRD rebuilds were also identified and set aside for dispositioning.

While awaiting the completion of the As Low As Reasonably Achievable (ALARA) review for the vacuum cleaner, the RPT received permission from a Station Laborer Supervisor to move the bags of irradiated metals to a metal storage HIC located in the South Stock Bay (SSB) (same elevation different room within RadWaste). The work crew proceeded to move about 35 to 40 bags of metal into the South Stock Bay and opened the bags and dumped the metals into the irradiated metals storage HIC. During this evolution, one of the bags was cut open and found to contain a vacuum bag rather than irradiated metals. The laborers re-closed the bag. The crew completed the activity and proceeded to access control for the end of the shift. Upon attempting to exit the Radiological Protected Area (RPA), the crew and other workers in the radwaste area alarmed the whole body friskers. Investigation identified that contamination had spread throughout the floor areas of the affected radioactive waste area.

Two laborers involved with the opening and dumping of the irradiated metals were facially contaminated. After several showers, the workers were given whole body counts which indicated the presence of cobalt-60 (highest level was 158 nanocuries).

The inspectors' findings and results of the licensee's prompt investigation identified the following issues were associated with this event:

- The radiation work permit (RWP) the workers were on did not allow for the movement of irradiated metals.
- No air sample was taken in the area of the SSB where the bags of irradiated metals were being opened. In addition, no engineering controls were used in the SSB during the opening and dumping of the bags of metal. The RWP for work in that room did indicate the need for the use of a high efficiency particulate air (HEPA) system. Failure to perform an evaluation of radiological hazards to ensure the use of process or engineering controls to limit airborne radioactivity concentrations is a Violation of 10 CFR 20.1701 (50-237;249/9-009-10).
- The RWP required the RPT to provide continuous coverage of the activity. During the opening and dumping of the bags of metal, the RPT monitored the first bag being opened and then did not return to the room to monitor the job's progress. This illustrated confusion on the part of RPTs fully understanding the expectations of continuous job coverage.

- The RPT allowed the workers to expand the scope of their activities without conducting a pre-job briefing to review any radiological controls and special situation contingencies.
- The desk RP Supervisor was not informed of the work crew's deviation from the originally discussed activity (shielding).

c. Conclusions

The performance of contractor and licensee radiation protection technicians in providing adequate radiological controls coverage during high risk radiological evolutions continued to be poor. Ongoing efforts to enhance the performance of RPTs had been minimally effective.

V. Management Meetings

X1 Exit Meeting Summary

The inspectors presented the inspection results to members of licensee management at the conclusion of the inspection on August 30, 1996. The licensee acknowledged the findings presented.

The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary and none were identified.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

S. Perry, Vice President, SWR Operations
E. Connell, Design Engineering Superintendent
T. Foster, Work Control and Outage Manager
R. Freeman, Plant Engineering Superintendent
J. Heffley, Units 2 and 3 Station Manager
C. Howland, Radiation Protection Manager
R. Kundalkar, Site Engineering Manager
T. Nauman, Unit 1 Station Manager
T. O'Connor, Operations Manager
F. Spangenburg, Regulatory Assurance Manager
P. Swafford, Unit 2/3 Maintenance Superintendent
P. Tzomes, Support Services Director
D. Winchester, Safety Quality Verification Director

INSPECTION PROCEDURES USED

IP 37551: On-site Engineering
IP 61726: Surveillance Observations
IP 62707: Maintenance Observations
IP 71707: Plant Operations
IP 83750: Occupational Radiation Exposure
IP 83822: Radiation Protection
IP 92901: Followup - Plant Operations
IP 92902: Followup - Maintenance
IP 92903: Followup - Engineering

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-249/96009-01	VIO	Failure to Review Special Test Procedure
50-237;249/96009-02	IFI	Old Procedure Revisions Posted in Field
50-249/96009-03	VIO	SRO Returned to License Duties Improperly
50-249/96009-04	VIO	No Unit 3 EDG Operable Due To Testing
50-237;249/96009-05A	VIO	Ineffective Corrective Actions for Calculations on Battery Tests
50-237;249/96009-05B	VIO	Ineffective Corrective Actions for Safety Related Relay Failures (AIT followup)
50-237;249/96009-06	NCV	Secondary Containment Leak Rate Testing Done in Greater Than 5 MPH winds.
50-237;249/96009-07	URI	Installation of Compression Fittings With Interchanged Hardware From Different Manufacturers
50-249/96009-08	NCV	Inadequate Procedures for Containment Integrity, HPCI Operation, and Recover from a Reactor Trip (AIT followup)
50-237;249/96009-09	NCV	RPS Scram Pilot Valve Solenoid Indicating Lights
50-237;249/96009-10	VIO	Failure to Perform and Evaluation of Radiological Hazards

Closed

50-237/96006-03	IFI	Loss of Annunciators.
50-237/96-012	LER	Inadvertent Start of the 2/3 Diesel Generator due to Personnel Error.
50-237/94022, Rev 0,1	LER	Type B and C Leakage Limit Exceeded Due to Worn Seating Surface on HPCI Check Valve
50-237/95018, Rev 0,1	LER	Type B and C Leakage Limit Exceeded Due to Excessive Leakage Past HPCI Check Valve
50-249/95011, Rev 0,1,2	LER	Type B and C Leakage Limit Exceeded Due to Excessive Leakage Past HPCI Check Valve
50-237/94031, Rev 0	LER	Type A Administrative Limit Exceeded Due to Leaking HPCI Primary Containment Isolation Check Valve 2-2301-34
50-237;249/95008-03	URI	Failure to Maintain Secondary Containment
50-249/95012, Rev 0, 1	LER	Degraded Secondary Containment Condition Observed During Testing Due to Procedure Deficiency and Personnel Error
50-249/96005-01	URI	Evaluate Operability of Unit 3 Low Pressure Emergency Core Cooling Systems Due to the Corner Room Structural Steel Nonconforming Condition

Discussed

50-249/96-009	LER	Licensee Forced into Noncompliance with Technical Specification 3.9.D to Complete Diesel Generator Operability Run due to Work Management Process Deficiency.
50-237;249/96005-02, 03	VIO	Structural Steel Problems
50-237/96006-11	URI	Containment Electrical Penetrations Contained in the Shutdown Cooling Pump Rooms Exceeded the Temperature Limits of 125°F Specified in the UFSAR, Table 3.8-3.

LIST OF ACRONYMS USED

ALARA	As Low As Reasonably Achievable
CCSW	Containment Cooling Service Water
CFR	Code of Federal Regulations
CRD	Control Rod Drive
DAP	Dresden Administrative Procedure
DES	Dresden Electrical Surveillance
DOA	Dresden Operating Abnormal
DOP	Dresden Operations Procedure
DOS	Dresden Operations Surveillance
DTS	Dresden Technical Surveillance
EDG	Emergency Diesel Generator
EMD	Electrical Maintenance Department
EPIP	Emergency Plan Implementing Procedures
FWCS	Feedwater Level Control System
HEPA	High Efficiency Particulate Air
HIC	High Integrity Container
HPCI	High Pressure Coolant Injection
IAC	Instrument Air Compressor
IFI	Inspector Followup Item
IN	Information Notice
INPO	Institute of Nuclear Power Operations
LER	Licensee Event Report
LLRT	Local Leak Rate Test
LPCI	Low Pressure Coolant Injection
NLO	Non-Licensed Operator
NOV	Notice of Violation
NSO	Nuclear Station Operator
OnSR&IF	On-Site Review and Investigation Function
OSS	Out Of Service
PIF	Problem Identification Form
PORC	Plant Operations Review Committee
RO	Reactor Operator
RPA	Reactor Protected Area
RPR	Recirculation Pipe Replacement
RPS	Reactor Protection System
RPT	Radiation Protection Technician
RWP	Radiation Work Permit
SOS	Shift Operations Supervisor
SP	Special Procedures
SRO	Senior Reactor Operator
SBGT	Standby Gas Treatment
SQV	Site Quality Verification
SSB	South Stock Bay
TS	Technical Specification
TSUP	Technical Specification Upgrade Program
UFSAR	Updated Final Safety Analysis Report
URI	Unresolved Item
WEC	Work Execution Center
WR	Work Request