

U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Reports No. 50-10/81-05; 50-237/81-11; 50-249/81-07

Docket Nos. 50-010; 50-237;
50-249

Licenses No. DPR-02; DPR-19;
DPR-25

Licensee: Commonwealth Edison Company
P. O. Box 767
Chicago, IL 60690

Facility Name: Dresden Nuclear Power Station - Units 1, 2, and 3

Inspection At: Dresden Site, Morris, IL

Inspection Conducted: February 28, 1981 through April 3, 1981

Inspectors: *T. M. Tongue*
T. M. Tongue

April 24, 1981

M. J. Jordan
M. J. Jordan

April 24, 1981

D. L. Robinson
D. L. Robinson

May 7, 1981

Approved by: *F. W. Reimann*
F. W. Reimann, Acting Chief
Reactor Projects Section 1C

May 7, 1981

Inspection Summary

Inspection on February 28, 1981 through April 3, 1981 (Reports No. 50-10/81-05; 50-237/81-11; 50-249/81-07)

Areas Inspected: Routine, unannounced resident inspection of Operational Safety Verification, Monthly Maintenance Observation, Monthly Surveillance Observation, Licensee Event Reports, Startup Testing-Refueling Procedure Review, Surveillance-Refueling, Maintenance-Refueling, and Inspection during Long Term Shutdown, and Contractor Employee Concerns. The inspection included a total of 246 inspector-hours onsite by three NRC inspectors, including 50 inspector-hours onsite during off-shifts.

Results: Of the ten areas inspected, two items of noncompliance are identified in paragraph 5 - personnel overexposure. No other items of noncompliance were identified.

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DETAILS

1. Persons Contacted

- *D. Scott, Station Superintendent
- *R. Ragan, Operations Assistant Superintendent
- J. Eenigenburg, Maintenance Assistant Superintendent
- *D. Farrar, Administrative Services and Support Assistant Superintendent
- C. Sargent, Unit 1 Operating Engineer
- J. Wujciga, Unit 2 Operating Engineer
- M. Wright, Unit 3 Operating Engineer
- D. Adam, Waste Systems Engineer
- G. Myrick, Rad-Chem Supervisor
- T. Gilman, Rad-Protection Supervisor
- B. Saunders, Station Security Administrator
- B. Zank, Training Supervisor
- *E. Wilmer, Q. A. Coordinator
- *R. Stobert, Q. A. Engineer

The inspector also talked with and interviewed several other licensee employees, including members of the technical and engineering staffs, reactor and auxiliary operators, shift engineers and foremen, electrical, mechanical and instrument personnel, and contract security personnel.

*Denotes those attending one or more exit interviews conducted on March 12, 1981, March 27, 1981, and April 3, 1981.

2. Operational Safety Verification

The inspectors observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the period of February 28 through April 3, 1981. The inspectors verified the operability of selected emergency systems, reviewed tagout records and verified proper return to service of affected components. Tours of Unit 3 reactor building and turbine building were conducted to observe plant equipment conditions, including potential fire hazards, fluid leaks, and excessive vibrations and to verify that maintenance requests had been initiated for equipment in need of maintenance. The inspectors, by observation and direct interview, verified that the physical security plan was being implemented in accordance with the station security plan.

The inspectors observed plant housekeeping/cleanliness conditions and verified implementation of radiation protection controls. During the period of February 28 through April 3, 1981, the inspectors walked down the accessible portions of the Unit 3 LPCI, Core Spray, SBLC, and the Unit 2/3 Diesel Generator systems to verify operability. The inspectors also witnessed portions of the radioactive waste system controls associated with radwaste shipments and barreling.

These reviews and observations were conducted to verify that facility operations were in conformance with the requirements established under technical specifications, 10 CFR, and administrative procedures.

During this report period, pickets were set up at site access points by Operating Engineers, Local 150, AFL-CIO, over an employment dispute with a licensee contractor regarding not having operating engineers working on the site. The licensee security force went into a "yellow alert" status. The inspector made observations to verify that site security, access to the site, and normal operations were not affected. The dispute was settled and pickets removed after about one week of demonstration.

No items of noncompliance were identified.

3. Monthly Maintenance Observation

Station maintenance activities of safety related systems and components listed below were observed/reviewed to ascertain that they were conducted in accordance with approved procedures, regulatory guides and industry codes or standards and in conformance with technical specifications.

The following items were considered during this review: the limiting conditions for operation were met while components or systems were removed from service; approvals were obtained prior to initiating the work; activities were accomplished using approved procedures and were inspected as applicable; functional testing and/or calibrations were performed prior to returning components or systems to service; quality control records were maintained; activities were accomplished by qualified personnel; parts and materials used were properly certified; radiological controls were implemented; and, fire prevention controls were implemented.

Work requests were reviewed to determine status of outstanding jobs and to assure that priority is assigned to safety related equipment maintenance which may affect system performance.

The following maintenance activities were observed/reviewed:

Unit 3 Recirc Pump and Scoop tube control work.
Unit 3 LPRM Voltage Plateau traces.
Unit 2/3 Diesel Generator.
Unit 2/3 SBTG Moisture removal from the charcoal absorbers.

Following completion of maintenance on the Unit 2/3 Diesel Generator, the inspector verified that this system was returned to service properly.

No items of noncompliance were identified.

4. Monthly Surveillance Observation

The inspectors observed technical specifications required surveillance testing on the Unit 3, Turbine First Stage 45% SCRAM bypass, and the isolation condenser radiation monitor and verified that testing was performed in accordance with adequate procedures, that test instrumentation was calibrated, that limiting conditions for operation were met,

that removal and restoration of the affected components were accomplished, that test results conformed with technical specifications and procedure requirements and were reviewed by personnel other than the individual directing the test, and that any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel.

The inspector also witnessed portions of the following test activities: Unit 3 LPRMS, IRMS, SRMS, SBCT Surveillance Test and Main Steam Line Low Pressure Isolation.

The inspectors observed an annual communications test of all off-site communication systems available to the station, which was held in conjunction with a GSEP - Health Physics drill on March 25, 1981. The GSEP - Health Physics portion of the drill was observed by three Region III inspectors and will be addressed in a separate inspection report.

The resident inspectors observed that the communication systems tested gave the station the ability to communicate with appropriate on-site and off-site facilities that would be involved in an emergency.

No items of noncompliance were identified.

5. Licensee Event Reports Followup

Through direct observations, discussions with licensee personnel, and review of records, the following event reports were reviewed to determine that reportability requirements were fulfilled, immediate corrective action was accomplished, and corrective action to prevent recurrence had been accomplished in accordance with technical specifications.

<u>LER's</u>	<u>TITLE</u>
<u>UNIT 2</u>	
80-16	Leak Between LPCI 2-1501-25A Valve and Drain Valve 2-1501-92A
80-24	Oxygen Analyzer Failure
80-28	Uncoupling of CRD C-11
<u>UNIT 3</u>	
80-02	Failure of MO 3-1501-11B Valve to Operate
80-04	Failure of Jet Pump #13 (B Loop)
80-28	Torus to Rx Building Vacuum Breaker 3-1601-20A Inoperative
80-30	3-203-2B & 2D Unit 3 MSIV Closure in Less than 3 seconds.
80-31	West Bank Scram Discharge Piping Found Not Drained
80-32	APRM Ch 3 Failed to Cause a Rod Block
80-33	CCSW Pump Casing Leak

On March 5, 1981, the licensee notified the NRC Senior Resident Inspector (SRI) and IE:HQ via the ENS phone, that an individual working in the Unit 2 reactor vessel received a whole body radiation exposure of approximately 22 rems, which is about seven times the allowable exposure limit. The

followup investigation of this event involved approximately 2½ man weeks of effort by the SRI in addition to efforts by Regional health physics inspectors and an investigator. The results of the investigation into this item of noncompliance will be addressed in a separately issued investigation report. (50-237/81-07). The event created considerable news media interest.

On March 24, 1981, the licensee reported a second incidence involving the exposure of another individual to radiation in excess of quarterly dose limits. This apparant noncompliance was reviewed by a regional radiation specialist, and the results will be presented in a separate inspection report. (50-237/81-14).

No other items of noncompliance were identified.

6. Startup Testing Refueling Procedure Review

The inspector reviewed current procedures relating to the Dresden-2 Cycle 8 startup test program scheduled for late April 1981. The inspector informed the licensee that several of these procedures would require revision prior to their use in April to avert potential procedural noncompliance. The licensee reviewed said procedures and stated that these procedures will be submitted for appropriate action. This matter will be reviewed during the next inspection and is open inspection item 50-237/81-11-C1.

No items of noncompliance were identified.

7. Surveillance - Refueling

The inspectors observed the LPRM Insulation resistance and voltage breakdown, Jet pump inspection surveillance, Torus snubbers, SBLC injection, Fuel channel dimension, and ARI valve testing on Unit 2 to verify that the tests were covered by properly approved procedures; that the procedures used were consistant with regulatory requirements, licensee commitments, and administrative controls; that minimum crew requirements were met, test prerequisites were completed, special test equipment was calibrated and in service, and required data was recorded for final review and analysis; that the qualifications of personnel conducting the test were adequate; and that the test results were adequate.

No items of noncompliance were identified.

8. Maintenance - Refueling

The inspector verified maintenance procedures include administrative approvals for removing and return of systems to service; hold points for inspection/audit and sign-off by QA or other licensee personnel; provisions for operational testing following maintenance; provisions for special authorization and fire watch responsibilities for activities involving welding, open flame, and other ignition sources; reviews of material certifications; provisions for assuring LCO requirements were met during repair; provisions for housekeeping during and following maintenance; and responsibilities for reporting defects to management.

The inspector observed the maintenance activities listed below and verified work was accomplished in accordance with approved procedures and by qualified personnel.

UNIT 2

Jet Pump Hold Down Beam Replacement
Reactor Vessel Hydro-vacuuming of internals
Control Rod Replacement
Feed Water Sparger Installation
LPCI Heat Exchanger Tube replacement
Head Spray and Support Structure Surveillance

Torus Modifications:

Tee Quenchers Installation
Downcomer support plate installation
Downcomer Bracing supports installation
Vent Header Deflector installation
Catwalk reinforcement installation
Torus Baffle plate removal

No items of noncompliance were identified.

9. Inspection During Long Term Shutdown

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the period of February 28 through April 3, 1981. The inspector verified surveillance tests required during the shutdown were accomplished, reviewed tagout records, and verified applicability of containment integrity. Tours of Units 1 & 2 accessible areas, including exterior areas were made to make independent assessments of equipment conditions, plant conditions, radiological controls, safety, and adherence to regulatory requirements and to verify that maintenance requests had been initiated for equipment in need of maintenance. The inspector observed plant housekeeping/cleanliness conditions, including potential fire hazards, and verified implementation of radiation protection controls. The inspector by observation and direct interview verified that the physical security plan was being implemented in accordance with the station security plan. The inspector reviewed the licensee's jumper/bypass controls to verify there were no conflicts with technical specifications and verified the implementation of radioactive waste system controls.

No items of noncompliance were identified.

10. Contractor Employee Concerns

A licensee contractor employee requested an opportunity to discuss concerns with the Resident Inspectors with regard to an apparent personal internal uptake of radioactive material. The individual expressed anxiety about the exposure (an apparent 10% lung burden of Cobalt-60) as to how it would affect him, his future employment at nuclear power plants, and why he was being recounted so frequently (daily), etc. His concerns appeared to be unfairly expanded as a result of familiarity with intense news media coverage of alleged hazards of radioactivity associated with nuclear power plants, and humor expressed by some licensee personnel with respect to his situation. The inspectors reviewed and verified the information related to the radioactive material ingestion with the licensee.

No items of noncompliance were identified.

11. Headquarters/Regional Requests

At the request of Region III, the Resident Inspectors provided a list of inspector identified concerns, noncompliance, etc., that have appeared at Dresden over the past several years as input information for a regional report.

Temporary Instruction, TI 2500/05; TMI Action Plan - Tracking IE Verification, was issued as instructions to be followed with the computerized tracking system. The resident inspectors reviewed the computer data supplied with the TI for consistency with licensee commitments and NUREGS 0578, 0660, and 0737. This information was returned to the Region III office and will be updated as items are added by headquarters or cleared by inspection activities.

12. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) throughout the month and at the conclusion of the inspection on April 3, 1987 and summarized the scope and findings of the inspection activities. The licensee acknowledged the findings of the inspection.