

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

REGION III

Report No. 50-010/77-32; 50-237/77-28; 50-249/77-28

Docket No. 50-10; 50-237; 50-249 License No. DPR-2; 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: October 19-21 and 25, 1977

Inspector: *J. L. Barker*  
J. L. Barker

*11/9/77*

Approved by: *W. S. Little*  
W. S. Little, Chief  
Nuclear Support Section

*11/9/77*

Inspection Summary

Inspection on October 19-21 and 25, 1977 (Report No. 50-010/77-32;  
50-237/77-28; 50-249/77-28)

Areas Inspected: Routine, unannounced inspection of licensee action on previous inspection findings, maintenance activities during a refueling outage, preparations for startup following a refueling outage, startup testing after a refueling outage, and review of plant operations. The inspection involved 28 inspector-hours onsite by one NRC inspector.  
Results: Of the five areas inspected, no apparent items of noncompliance or deviations were identified in four areas; two apparent items of noncompliance (Infraction - failure to adhere to an approved procedure, Infraction - failure to make a proper temporary procedure change - Paragraph 6) were identified in one area.

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## DETAILS

### 1. Persons Contacted

- \*B. Stephenson, Station Superintendent
- \*B. Shelton, Administrative Assistant
- \*C. Sargent, Technical Staff Supervisor
- \*N. Scott, Lead Operating Engineer
- \*G. Reardanz, Quality Assurance Inspector, Operations
  - E. Budzichowski, Unit 1 Operating Engineer
  - J. Kolanowski, Unit 2 Operating Engineer
  - J. Dolter, Nuclear Engineer
  - J. Eenigenberg, Maintenance Engineer
  - E. Armstrong, Nuclear Engineer
  - G. Rombo, Assistant Unit 1 Operating Engineer

The inspector also contacted five (5) other licensee employees, including two refueling foremen and three Nuclear Station Operators.

\*Denotes those present at exit interview.

### 2. Licensee Action on Previous Inspection Findings

(Closed) Noncompliance (50-249/76-20): Failure to verify fuel grapple "Hoist Loaded." The inspector found that modifications to the fuel grapple included a "Grapple Latched" indicating light and procedural requirements for its operation prior to moving any fuel. The inspector further found that all refueling interlocks functioned as designed.

### 3. Maintenance Activities During a Refueling Outage, Units 1 and 2

The inspector verified that major maintenance activities scheduled during refueling outages were conducted by qualified personnel in accordance with approved procedures. The inspector specifically verified that the outage maintenance activities included administrative controls for removing the system from service and returning it to service, hold points for inspection/audit and signoff by QC/QA, provisions for testing following maintenance, provisions for assuring that system valves, breakers, etc. are aligned for normal service, provisions for removal of jumpers, and responsibility for reporting to licensee management details concerning design or construction related deficiencies identified during maintenance.

The inspector reviewed licensee procedures DAP 4-2, "Conduct of Maintenance," QP 3-52, "Design Control for Operations - Plant Maintenance," QAM Section 4.1, "Process Control - Production Order System," and DAP 15-1, "Work Requests."

No items of noncompliance or deviations were identified.

4. Preparations for Startup Following a Refueling Outage, Unit 2

The inspector verified that systems disturbed or tested during refueling outages will be returned to an operating status prior to plant startup. The inspector further verified that plant startup procedures require adherence to the licensee's technical specifications and commitments, as they pertain to startup testing and power operations prerequisites. The inspector reviewed licensee procedures DGP 1-1, "Unit 2/3 Normal Unit Startup," DGP 1-S1, "Unit 2/3 Master Startup Checklist," DGP 1-S2, "Unit 2/3 Minimum Startup Checklist," and DG 1-S3, "Unit 2/3 Master Outage Checklist."

No items of noncompliance or deviations were identified.

5. Startup Testing - Refueling, Unit 1

The inspector verified that startup testing was conducted in accordance with approved procedures and that the facility is being operated in conformance with NRC requirements and licensee procedures. The inspector verified that the licensee conducted control rod drive friction and scram tests, control rod sequence and reactivity checks, core power distribution limits checks, calibration of power range monitors (both incore and excore), core thermal power determinations, and reactor shutdown margin determinations. The inspector reviewed procedures and test results for control rod drive friction and scram tests, control rod sequence and reactivity checks, core thermal power evaluations, and shutdown margin determinations and verified that the refueling outage start-up testing was conducted in accordance with technically adequate procedures and in accordance with licensed limits.

No items of noncompliance or deviations were identified.

6. Review of Plant Operations, Unit 1

The inspector verified that systems disturbed or tested during the refueling outage were returned to an operating status prior

to plant startup, that control rod withdrawal sequence and rod withdrawal authorization were available and in effect prior to the startup after refueling, and that surveillance tests were performed during the refueling outage as required by Technical Specifications.

The inspector reviewed licensee procedures DGP 1-1, "Unit 1 Normal Startup," DGP 1-S1, "Unit 1 Master Startup Checklist," DGP 1-S2, "Unit 1 Minimum Startup Checklist," and DGP 1-S3, "Unit 1 Master Outage Checklist;" Unit 1 control room logs for the dates September 14, 1977 through October 1, 1977; and the Unit 1 outage package, including all operations surveillances, startup checklists, and valve lineup checklists during the refueling outage.

The inspector noted two items of regulatory concern which he considered important to safety. First, technical specifications 6.2.D requires that temporary procedure changes be approved by two members of the plant management staff, at least one of whom holds a Senior Reactor Operator's License on the unit affected. During his review of the outage package. The inspector found that six different valve lineup checklists (specifically DOP 020-M2, DOP 240-M1, DOP 240-M2, DOP 100-M1, DOP 3500-M1, and DOP 5400-M2) performed prior to startup during September, 1977 contained one or more instances where the equipment operator made unapproved changes to the valve lineup checklists. The inspector considered this item significant in that there was no management approval of these changes to plant status as originally determined by the Dresden Onsite Review when the checklists were approved. The inspector also noted that a Nuclear Station Operator made a temporary change to a surveillance procedure (DOS 500-4) during September 1977. The unapproved temporary changes went unnoticed, even though there were several levels of review, until the inspector noted the changes. This item is, therefore, considered an item of noncompliance of significant safety concern.

A second item of noncompliance involves Technical Specification 6.2.A which requires that detailed procedures be prepared, approved, and adhered to for normal startup, operation, shutdown, testing, surveillance, and maintenance of systems involving nuclear safety of the facility. While reviewing the outage documentation package, the inspector noted that during September, 1977, while performing startup preparation, a startup, and surveillances associated with a startup, the shift engineer did not review a normal unit startup procedure, a valve lineup checklist, and a surveillance procedure

(DGP 1-1, DOP 5400-M4, and DOS 300-5, respectively) as is required by each procedure containing provisions for a shift engineer's signature and dating. The inspector considers this a breakdown in middle management overview of the operations of the facility. This item is considered an item of noncompliance.

7. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) at the conclusion of the inspection on October 25, 1977, and summarized the scope and findings of the inspection. The licensee's representative acknowledged that the two items of regulatory concern were a significant breakdown in middle management control of the facility's operations.