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

REGION III

Report No. 50-10/79-08; 50-237/79-12; 50-249/79-10

Docket No. 50-10; 50-237; 50-249 License No. DPR-2; DPR-19; DPR-25

Licensee: Commonwealth Edison Company
Post Office Box 767
Chicago, IL 60690

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

Inspection At: Dresden Site, Morris, IL

Inspection Conducted: April 2-30, 1979

Inspector: J. I. Barker for 5-10-79

Approved By: R. L. Spessard, Chief 5-10-79
Reactor Projects Section 1

Inspection Summary

Inspection on April 2-30, 1979 (Report No. 50-10/79-08; 50-237/79-12; 50-249/79-10)
Areas Inspected: Routine, announced resident inspection of maintenance; plant operations; physical protection-security organization; physical protection-physical barriers; physical protection-access control (identification, authorization, badging, search, and escorting); physical protection-communications; review of plant operations prior to startup after refueling outage, Unit 2; review and followup on licensee event reports; refueling activities, Unit 2; surveillance of safety-related systems/components required by Technical Specifications; and calibration of safety components required by Technical Specifications. The inspection involved 111 inspector-hours onsite by one NRC inspector.
Results: Of the eleven (11) areas inspected, there were no items of noncompliance or deviations in ten (10) areas. There was one apparent item of noncompliance (infraction - exceeding a limiting condition for operation - paragraph 9) identified in one area.

DETAILS

1. Persons Contacted

*B. Stephenson, Station Superintendent
*A. Roberts, Assistant Superintendent
*B. Shelton, Assistant to Station Superintendent
*R. Ragan, Lead Operating Engineer
*D. Farrar, Technical Staff Supervisor
E. Budzichowski, Unit 1 Operating Engineer
J. Wujciga, Unit 2 Operating Engineer
C. Sargent, Unit 3 Operating Engineer
B. Sanders, Station Security Administrator
*R. Stobert, QA

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 maintenance personnel, and contract security personnel.

*Denotes those attending one or more exit interviews conducted on April 6, 20 and 27, 1979.

2. Maintenance

The inspector, through direct observations and record review, verified that reactor control and power distribution, instrumentation, emergency core cooling, and containment systems maintenance activities were conducted in accordance with established procedures and Technical Specifications; verified that required administrative approvals were obtained prior to initiating work; verified that maintenance activities were accomplished using approved and technically adequate procedures; verified that the activities were inspected in accordance with the provisions of licensee's requirements; verified that the activities included functional testing and calibration as necessary prior to returning the component or system to an operating status; verified that quality control records were available; verified that activities were accomplished by qualified personnel; verified that radiological controls were established for worker protection, including minimizing personnel exposure; verified that materials or components used were certified as required by plant procedures; verified that QC hold points, plant status and safety controls, and tagging

operations appeared adequate; and verified that associated limiting conditions for operation were met in accordance with Technical Specifications.

The inspector observed maintenance in progress concerning the following work requests: (1) Unit 2, WR 841, "B" CCSW pump, WR 2456, Grapple Jam Light, WR 2544, Scram Discharge Volume Test Solenoid, WR 2777, "D" Electromatic Relief Valve, WR 2885, LPCI valve 1501-25, WR 2890, "B" LPCI Heat Exchanger, and WR 2993, LPRM 5A-4D-25; and (2) Unit 3, WR 3011, LPCI Spray Valve 1501-38A, and WR 3432, "B" Squib Valve Circuit Failure.

The inspector reviewed the following complete work packages: (1) Unit 2, WR 2472, SRM 21 Discriminator and (2) Unit 3, WR 2370, Stop Valve PS 3-2355 (HPCI Supply Discharge Pressure Switch).

No items of noncompliance or deviations were identified.

3. Plant Operations

The inspector reviewed the plant operations including examinations of control room log books, routine patrol sheets, shift engineer log book, equipment outage logs, special operating orders, and jumper and tagout logs for the month of April, 1979. The inspector observed plant operations during six offshifts during the month of April, 1979 The inspector also made visual observations of the routine surveillance and functional tests in progress during the period. This review was conducted to verify that facility operations were in conformance with the requirements established under Technical Specifications, 10 CFR, and Administrative Procedures. A review of the licensee's deviation reports for the period was conducted to verify that no violations of the licensee's Technical Specifications were made. The inspector conducted a tour of Units 1, 2 and 3 reactor buildings and turbine buildings throughout the period and noted that the monitoring instrumentation was recorded as required, radiation controls were properly established, fluid leaks and pipe vibrations were minimal, seismic restraint oil levels appeared adequate, equipment caution and hold cards agreed with control room records, plant housekeeping conditions/cleanliness were adequate, and fire hazards were minimal. The inspector observed shift turnovers to verify that plant and component status and problem areas were being turned over to relieving shift personnel. The inspector observed sampling and chemical analysis of water chemistry samples to verify that

water chemistry was being maintained in accordance with Technical Specifications.

No items of noncompliance or deviations were noted.

4. Physical Protection - Security Organization

The inspector verified by observation and personnel interview (once during each operating shift) that at least one full time member of the security organization who has the authority to direct the physical security activities of the security organization was onsite at all times; verified by observation that the security organization was properly manned for all shifts; and verified by observation that members of the security organization were capable of performing their assigned tasks. There were no weapons qualifications conducted during this monthly inspection.

No items of noncompliance or deviations were identified.

5. Physical Protection - Physical Barriers

The inspector verified that certain aspects of the physical barriers and isolation zones conformed to regulatory requirements and commitments in the physical security plan (PSP); that gates in the protected area were closed and locked if not attended; that doors in vital area barriers were closed and locked if not attended; and that isolation zones were free of visual obstructions and objects that could aid an intruder in penetrating the protected area.

No items of noncompliance or deviations were identified.

6. Physical Protect - Access Control (Identification, Authorization, Badging, Search, and Escorting)

The inspector verified that all persons and packages were identified and authorization checked prior to entry into the protected area (PA), all vehicles were properly authorized prior to entry into a PA, all persons authorized in the PA were issued and displayed identification badges, records of access authorized conformed to the PSP, and all personnel in vital areas were authorized access; verified that all persons, packages, and vehicles were searched in accordance to regulatory requirements, the PSP, and security procedures; verified that persons authorized escorted access were accompanied by an escort when

within a PA or vital area; verified that vehicles authorized escorted access were accompanied by an escort when within the PA; and verified by review of the licensee's authorization document that the escort observed above was authorized to perform the escort function.

No items of noncompliance or deviations were identified.

7. Physical Protection Communications

The inspector verified by observation (during each operating shift) that communications checks were conducted satisfactorily at the beginning of and at other prescribed time(s) during the security personnel work shift and that all fixed and roving posts, and each member of the response team successfully communicate from their remote location; and verified that equipment was operated consistent with requirements in the PSP and security procedures.

No items of noncompliance or deviations were identified.

8. Review of Plant Operations Prior to Startup after Refueling Outage, Unit 2

The inspector verified that plans existed to test the primary cooling system, nuclear instrumentation system, feedwater system, control rod drive system, and emergency core cooling systems which underwent maintenance or were disturbed during the refueling outage and that the plant startup procedures require adherence to the licensee's Technical Specifications and commitments, as they pertain to startup testing and power operation prerequisites.

No items of noncompliance or deviations were identified.

9. Review and Followup on Licensee Event Reports

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.

Unit 1

LER 78-24, Backup diesel generator inoperative due to failure of fuel oil transfer pump.

Unit 2

LER 78-23, HPCI system isolated and declared inoperative during surveillance testing.

LER 78-35, Fuel storage racks cracked.

LER 78-45, Auto blowdown switch, PS 2-1430-1466D, failed to trip within Technical Specification limits.

LER 78-57, Core spray system flow test valve, 2-1402-4B, failed to shut against pump pressure.

LER 78-68, Recirculation system discharge bypass valve breaker tripped.

LER 79-01, Torus level in excess of Technical Specification limits.

LER 79-02, HPCI failed to start.

LER-79-03, LPCI/Core spray pump discharge on auto blowdown permissive, PS 2-1430-1466D, tripped in excess of Technical Specification limits.

LER 79-04, LPCI full flow test valve, MO-2-1501-38A, failed.

LER 79-05, "D" Main steamline radiation monitor failed.

LER 79-08, LPCI minimum flow valve failed to shut.

LER 79-09, Loss of stack gas monitor.

LER 79-13, Unit 2/3 DG cooling water pump failure.

LER 79-14, Unit 2 DG failed to start.

LER 79-15, Generic loss of reactivity on control rod blades.

LER 79-16, Crack on 1 inch drain line on LPCI System.

LER 79-17, Containment isolation valves, AO-2-1601-23, 24, 60, 61 and 63, leakage exceeded Technical Specification limits.

Regarding LER 79-01, the inspector determined that on January 3, 1979 the maximum level in the torus as specified by Technical Specifications Section 3.7.A.1 was exceeded while troubleshooting a failure of the motor speed changer on the HPCI system. The inspector further determined the cause of exceeding Limiting Condition for Operation was personnel error rather than an inadequate procedure, as was reported by the licensee on January 31, 1979. The licensee agreed to change to event report to indicate personnel error. The cause of personnel error was attributed to his attention being directed to the operation of the HPCI turbine during repeated starting and stopping and the lack of continued monitoring of the torus level. This is considered an item of noncompliance (237/79-12-01). The licensee has cautioned operators on the importance of continuous monitoring of torus level during HPCI system testing and has initiated procedure changes to delineate more explicitly maximum and minimum levels to be maintained in the torus and to specifically caution the operator when evolutions are in progress which could affect torus level. The inspector has no further concerns on this matter. We will review the procedure changes when they have been completed.

Unit 3

LER 79-01, Main steamline high flow isolation switch, DPIS 3-261-2C, trip exceeded Technical Specification limits.

LER 79-03, Main steamline radiation monitor failed.

LER 79-04, Failure to perform full core scram testing on two control rod drives.

Regarding LER 79-04, the licensee determined during a quality assurance audit that control rod drives H-8 and K-8 were not

scram tested on May 1 , 1978, as is required by Technical Specifications 4.3.C.1. Corrective actions to prevent recurrence have been completed. This is considered a licensee identified item.

No items of noncompliance or deviations were identified, except as previously described.

10. Refueling Activities, Unit 2

The inspector verified that prior to the handling of fuel in the core, all surveillance testing required by the Technical Specifications and licensee's procedures had been completed; verified that during the outage the periodic testing of refueling related equipment was performed as required by Technical Specifications; observed all shifts of the fuel handling operations (removal, inspection and insertion) and verified the activities were performed in accordance with the Technical Specifications and approved procedures; verified that containment integrity was maintained as required by Technical Specifications; verified that good housekeeping was maintained on the refueling area; and, verified that staffing during refueling was in accordance with Technical Specifications and approved procedures.

No items of noncompliance or deviations were identified.

11. Surveillance of Safety Related Systems/Components Required by Technical Specifications

The inspector observed Technical Specifications required surveillance testing (other than calibrations and checks) on the emergency core cooling system, Automatic Depressurization System (ADS) and High Pressure Coolant Injection (HPCI) system and verified that testing was performed in accordance with technically adequate procedures, that test results were in conformance with Technical Specifications and procedure requirements and were reviewed by personnel other than the individual directing the test, and that any deficiencies identified during testing were properly reviewed and resolved by appropriate management personnel.

No items of noncompliance or deviations were identified.

12. Calibration of Safety Related Components Required by Technical Specifications

The inspector observed calibration of the high drywell pressure emergency core cooling and isolation pressure switches (DIS 1600-4) and verified conformance with Technical Specifications and use of a technically adequate procedure.

No items of noncompliance or deviations were identified.

13. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) on April 6, 20 and 27, 1979, and summarized the scope and findings of that weeks' inspection activities. The licensee acknowledged the item of noncompliance discussed on April 27, 1979.

Attachment: Preliminary
Inspection Findings

PRELIMINARY INSPECTION FINDINGS

1. LICENSEE	2. REGIONAL OFFICE
Commonwealth Edison Company Dresden Units 1, 2, 3	U.S. Nuclear Regulatory Commission 799 Roosevelt Rd. Glen Ellyn, IL. 60137 Region III

3. DOCKET NUMBERS	4. LICENSE NUMBERS	5. DATE OF INSPECTION
50-010, 50-237, 50-249	DPR-02, DPR-19, DPR-25	4/23 - 27/79

☐ 6. Within the scope of the inspection, no items of noncompliance or deviation were found.

☑ 7. The following matters are preliminary inspection findings:

Unit 2 Technical Specifications, Section 3.7.A.1. requires the maximum volume in the torus to be 115,655 cubic feet.

Contrary to the above, during a quarterly flow test and subsequent trouble shooting of the HPCI System on January 3, 1979, the Technical Specification required maximum volume in the torus was exceeded.

☑ 8. These preliminary inspection findings will be reviewed by NRC Supervision/ Management at the Region III Office and they will correspond with you concerning any enforcement action.

J. Shaw

Nuclear Regulatory Commission Inspector

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PRELIMINARY INSPECTION FINDINGS

1. LICENSEE	2. REGIONAL OFFICE
Commonwealth Edison Company Dresden Units 1, 2, 3	U.S. Nuclear Regulatory Commission 799 Roosevelt Rd. Glen Ellyn, IL. 60137 Region III

3. DOCKET NUMBERS	4. LICENSE NUMBERS	5. DATE OF INSPECTION
50-010, 50-237, 50-249	DPR-02, DPR-19, DPR-25	4/2-6/79

☑ 6. Within the scope of the inspection, no items of noncompliance or deviation were found.

☐ 7. The following matters are preliminary inspection findings:

☐ 8. These preliminary inspection findings will be reviewed by NRC Supervision/ Management at the Region III Office and they will correspond with you concerning any enforcement action.

F. L. Bartlett

Nuclear Regulatory Commission Inspector

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PRELIMINARY INSPECTION FINDINGS

1. LICENSEE	2. REGIONAL OFFICE
Commonwealth Edison Company Dresden Units 1, 2, 3	U.S. Nuclear Regulatory Commission 799 Roosevelt Rd. Glen Ellyn, IL. 60137 Region III

3. DOCKET NUMBERS	4. LICENSE NUMBERS	5. DATE OF INSPECTION
50-010, 50-237, 50-249	DPR-02, DPR-19, DPR-25	4/9-20/79

☑ 6. Within the scope of the inspection, no items of noncompliance or deviation were found.

☐ 7. The following matters are preliminary inspection findings:

☐ 8. These preliminary inspection findings will be reviewed by NRC Supervision/ Management at the Region III Office and they will correspond with you concerning any enforcement action.

J. G. Keppler

Nuclear Regulatory Commission Inspector

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