

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

REGION III

Report No. 50-010/78-25; 50-237/78-22; 50-249/78-24

Docket No. 50-010; 50-237; 50-249

License No. DPR-02, DPR-29; DPR-25

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

Facility Name: Dresden Units 1, 2, and 3

Inspection At: Dresden Site, Morris, IL

Inspection Conducted: July 5-6, 11-12, 19-20, August 17, 23-25, 29-31  
and September 1, 1978

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

9/19/78

Approved By: *R C Knop*  
R. C. Knop, Chief  
Reactor Projects Section 1

9/19/78

Inspection Summary

Inspection on July 5-6, 11-12, 19-20, August 17, 23-25, 29-31 and September 1, 1978

(Report No. 50-010/78-25; 50-237/78-22; 50-249/78-24)

Areas Inspected: Routine, unannounced inspection of followup on items of noncompliance/deviations; followup on outstanding inspection items, tests, and special reports; onsite review of licensee event reports; IE Bulletins/Circular followup; 10 CFR Part 21; and review of plant operations. The inspection involved 97 inspector-hours onsite by one NRC inspector

Results: No items of noncompliance or deviations were identified.

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## DETAILS

### 1. Persons Contacted

- \*B. Stephenson, Station Superintendent
- A. Roberts, Assistant Superintendent
- \*B. Shelton, Assistant to the Station Superintendent
- \*R. Ragan, Lead Operating Engineer
- \*D. Farrar, Technical Staff Supervisor
- E. Budzichowski, Unit 1 Operating Engineer
- C. Sargent, Unit 3 Operating Engineer
- J. Kolanowski, Unit 2 Operating Engineer
- D. Adam, Chemical and Health Physics Engineer
- \*G. Reardanz, Quality Assurance Coordinator
- \*G. Abrell, CECo Quality Assurance

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, and maintenance personnel.

\*Denotes those attending the exit interview.

### 2. Followup on Items of Noncompliance -Deviations

(Closed) - Noncompliance (50-237/78-20; 50-249/78-22): Failure to adhere to an approved surveillance and testing procedure. The inspector reviewed the licensee's program to better control equipment switching and valve lineup changes and found it to appear adequate.

(Closed) - Noncompliance (50-237/77-32): Failure to comply with QA program requirements. The inspector found that the licensee's corrective action to prevent recurrence of taking equipment out-of-service without proper controls appeared adequate and was working.

(Closed) - Noncompliance (50-237/77-32): Failure to follow procedures. The inspector found the licensee's corrective action to prevent flooding in the Unit 2 East LPCI/CS corner room appeared adequate and further that modifications to make the LPCI/CS corner room cooling water and diesel generator cooling water systems separate water systems appeared adequate and in accordance with licensee procedures.

(Closed) - Noncompliance (50-237/77-32): Failure to follow procedures. The inspector found that the licensee's corrective action to prevent taking equipment out-of-service without proper controls appeared adequate.

(Closed) - Noncompliance (50-237/77-35): Failure to maintain standby liquid control operable. The inspector found that the licensee's surveillance program to check locked-valve positions was being properly performed and in accordance with the licensee's procedures.

(Closed) - Noncompliance (50-237/77-35): Failure to follow procedures regarding flow bias testing. The inspector found that the licensee was following its surveillance procedures and properly testing the flow bias network.

(Closed) - Noncompliance (50-249/77-33): Lockout of both diesel generators No. 3 and No. 2/3 during operation. The inspector found that the licensee's corrective action to prevent recurrence of taking equipment out-of-service without proper controls appeared to be adequate.

(Closed) - Noncompliance (50-249/77-33): Failure to perform visual lineup surveillance of Unit 3 diesel generator. The inspector found that the Unit Operating Engineer, Lead Engineer, Shift Foreman, and Operator were routinely conducting walkthroughs of their individual control boards, and the overall knowledge of status of plant equipment had been substantially upgraded.

(Closed) - Noncompliance (50-237/77-35): Failure to follow outage procedure program when taking breaker 2871 out-of-service. The inspector determined that the licensee's program to prevent recurrence of equipment being taken out-of-service without adequate controls appeared adequate.

(Closed) - Noncompliance (50-237/77-35): Use of an inadequate under-voltage test procedure. The inspector verified that the licensee's surveillance procedures No. DOS 6600-5 and No. 6600-6, Bus Under-voltage and ECCS Integrated Functional Test for Unit 2(3) Diesel Generator and Unit 2/3 Diesel Generator had been revised to clarify adequately breaker positions, that supervisors were adequately reviewing surveillance data sheets, and that equipment being taken out-of-service was better controlled.

(Closed) - Noncompliance (50-237/77-35): Failure to complete surveillance after performing safety-related work. The inspector found that the licensee's program to prevent recurrence of equipment being taken out-of-service and placed back in service appeared adequate.

Regarding all items above except the noncompliance in Inspection Reports 50-237/78-20 and 50-249/78-22, the inspector noted that the licensee had implemented all corrective action committed to in their formal investigative report. The final recommendations for Booz-Allen Management Consultants have not yet been received. The items of non-compliance will be closed, but the inspector will review at a future inspection implementation of any recommendations received from Booz-Allen.

3. Followup on Outstanding Items, Test, and Special Reports

The inspector reviewed the licensee's program for the replacement of additional pipe whips and impingement protection for the Essential Service Cable Pan ESS-2 for Unit 3 (Letter, B. B. Stephenson, to J. G. Keppler, dated August 7, 1978). The inspector found that all modifications except that on the HPCI steam line had been completed. The licensee was experiencing difficulty in making structural welds around the uninsulated piping. The licensee should complete the entire modification package by September 15, 1978. The modifications will be reviewed when all modifications have been completed.

The inspector reviewed the licensee's report to the NRC (Letter B. B. Stephenson to J. G. Keppler, dated August 3, 1978), concerning extension of commitment date to modify the 125 volt DC system until December 31, 1978 because of the unavailability of a new 125 volt DC battery charger. The inspector found the licensee's request to be well-founded and will review the modification at a future date.

The inspector reviewed the licensee's modifications to separate the cooling water supply systems for the LPCI/CS corner room and the emergency diesel generator. The modifications appeared to be in accordance with the licensee's procedures.

The inspector reviewed the licensee's modification package to replace Unit 3 neutron monitoring and flow bypass switches. The modification appeared to be in accordance with the licensee's procedures.

No items of noncompliance or deviations were identified.

4. Onsite Review of 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 78-15, Fire Inspection of Unit 1 Cableway Not Performed. The licensee failed to perform the 0200 fire inspection on March 3, 1978 of Unit 1 cableway which is contrary to Technical Specifications Amendment No. 23, Section 2.C(5), "Interim License Condition," of January 6, 1978. An operating order to ensure the surveillance performance was issued on March 17, 1978. This is considered a licensee identified item.

Unit 2

LER 78-20, Unit 2/3 Diesel Generator Failed to Start  
LER 78-28, Spurious Closure of Recirculation Suction Valve During a  
LOCA

Regarding LER 78-20, an update report was forwarded to the NRC on June 30, 1978. The cause of the failure to start was determined to be a bad lug on the air start solenoid.

Regarding LER 78-28, the inspector found that the cause code and cause subcode on the May 5, 1978 event report to the NRC were incorrect. An update report on August 28, 1978 corrected the cause codes identified. The item will be followed up again when the final modification to the LPCI logic has been completed.

Unit 3

LER 78-03, LLRT Failure of Valves 1601-21, 22, 55, and 56  
LER 78-17, Spurious Close of Recirculation Suction Valve During a LOCA

Regarding LER 78-17, inspector's comments are the same as Unit 2, LER 78-20. No items of noncompliance or deviations were identified.

5. IE Circular/Bulletin Followup

Concerning the following IE Circulars, the inspector verified that the circular was received by licensee management, that a review for applicability was performed, and that when applicable, further action taken or planned was appropriate.

IEC 77-16, Emergency Diesel Generator Lockout Features

IEC 78-03, Packing Greater than Type A Quantities of Low Specific Activity Radioactive Material

IEC 78-04, Installation Errors that Could Prevent Closing of Fire Doors

IEC 78-09, Arcing of GE Company Size 2 Contractors

IEC 78-11, Recirculation MG Set Overspeed Stops

Concerning the followup IE Bulletins, the inspector verified by record review, observation, and discussion with licensee personnel that licensee management forwarded copies of the response to the bulletin to appropriate onsite management representatives, that information discussed in the licensee's reply was accurate, that corrective action taken was effected as described in the reply, and that the licensee's reply was prompt and within the time period described in the bulletin.

IEB 78-03, Potential Gas Mixture Accumulations Associated with BWR Offgas System Operations

IEB 78-05, Malfunctioning of Circuit Breaker Auxiliary Contact Mechanism - GE CR 105X



IEB 78-06, Defective Cutler-Hammer Type M Relays with DC Coils

IEB 78-07, Protection Afforded by Air-Line Respirators and Supplied Air-Hoods

IEB 78-08, Radiation Levels from Fuel Element Transfer Tubes

IEB 78-09, BWR Drywell Paths Associated with Inadequate Drywell Closure

IEB 78-10, Bergen-Patterson Hydraulic Shock Suppressor Accumulator Spring Coils

IEB 78-11, Examination of Mark-1 Containment Torus Welds

Regarding IEB 78-03, since April 1978 the licensee has been studying possible causes of offgas explosions and corrective action to minimize their possibility. The licensee has determined that the major causes of explosions are: (1) valve seat friction, (2) ionic discharge in the laminar flow layer of the offgas flow stream, and (3) static discharge due to improper grounding. The licensee appears to have corrected the grounding problems. In order to minimize valve friction, the licensee has implemented procedures which require: (1) all valving operations be eliminated except for emergencies during system operation, (2) all shutdown maintenance be performed with the system off-line, and (3) the flow lines be air sparged a minimum of one-hour prior to any maintenance being performed on the system. The last offgas explosion occurred on April 28, 1976. The licensee plans to place continuous air monitors (CAM) on the Unit 1 north corridor and on the Unit 2/3 radwaste building basement. The licensee's Station Nuclear Engineering Department (SNED) has recommended that relief valves (in accordance with GE SIL-38) be installed at the discharge of rupture discs to minimize pressure buildup. The station management has determined they will implement SNED recommendations.

No items of noncompliance or deviations were identified.

6. 10 CFR Part 21 Inspection

The purpose of the inspection was to ascertain whether the licensee and individuals subject to Part 21 regulations have established and are implementing procedures and controls to assure the reporting of defects and noncompliance. Corporate office implementation was verified and documented in NRC Inspection Report No. 50-254/78-19 and No. 50-265/78-20. The inspector verified proper implementation onsite. The inspector found that no program exists for tracking and maintaining Part 21 reports and documentation generated by the licensee's contractors and subcontractors. This item will be reviewed during a future inspection.

No items of noncompliance or deviations were identified.

7. Review of 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 period of June 28, 1978-September 1, 1978. 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 this 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 control was properly established, fluid leaks and pipe vibrations were minimal, seismic restraint oil levels appeared adequate, and equipment caution and hold cards agreed with control room records.

No items of noncompliance or deviations were identified.

8. Exit Interview

The inspector met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on September 1, 1978 and summarized the scope and findings of the inspection. The inspector discussed with Mr. B. Stephenson and Mr. B. Shelton via telecommunications on September 11, 1978 his findings concerning 10 CFR Part 21 (paragraph 6). The licensee's representations stated that they would place the item under immediate review.