U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-010/81-21; 50-237/81-38; 50-249/81-31(DPRP)

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: December 31, 1981 through January 29, 1982

Inspectors: T. M. Tongue R. D. Walker for

M. J. Jordan R. D. Walker for

F W. Reimann March 9, 1982

Approved By: R. D. Walker R. D. Walker

Inspection Summary

Inspection from December 31, 1981 through January 29, 1982 (Reports No. 50-010/81-21, 50-237/81-38, 50-249/81-31(DPRP))
Areas Inspected: Routine unannounced resident inspection of Followup on Previous Inspection Findings, Operational Safety Verification, Monthly Maintenance Observation, Monthly Surveillance Observation, Unusual Events, Plant Training, Plant Trips, Refueling Activities, Refueling Surveillance, Refueling Maintenance, Inspection During Long Term Shutdown, Regional Requests, Licensee Identified Items, and Bulletin Review. The inspection involved 202 inspector-hours onsite by three NRC inspectors, including 42 inspector-hours during offshift.
Results: Of the 14 areas inspected, no items of noncompliance were identified in 13 areas; one item of noncompliance was identified in one area (inadequate housekeeping - Paragraph 3).

DETAILS

SECTION 1

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
J. Brunner, Technical Staff Supervisor
J. Wujciga, Unit 1 Operating Engineer
J. Almer, Unit 2 Operating Engineer
M. Wright, Unit 3 Operating Engineer
T. Ciesla, Assistant Technical Staff Supervisor
D. Adam, Waste Systems Engineer
D. Sharper, Radiliogical Waste Foreman
*G. Myrick, Rad-Chem Supervisor
B. Saunders, Station Security Administrator
B.Zank, Training Supervisor
*E. Wilmer, QA Coordinator
*R. Stobert, QA 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 both exit interviews conducted on January 22 and 29, 1982.

2. Followup on Previous Inspection Findings

(Closed) Inspection Item 50-249/81-14-02. The inspector found that the licensee had completed the necessary repairs to the 150 ton overhead reactor building crane. The repairs included using the services of a private engineering firm for evaluation and consultation. The licensee did not write a licensee evaluation report on this problem because the crane was not used in the Restricted Mode condition identified in Technical Specifications.

3. Operational Safety Verification

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the period of December 31 through January 29, 1982. The inspector verified the operability of selected emergency systems, reviewed tagout records and verified proper return to service of affected components. Tours of Unit 2 reactor buildings and turbine buildings 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 inspector by observation and direct interview verified that the physical security plan was being implemented in accordance with the station security plan.

The inspector observed plant housekeeping/cleanliness conditions and verified implementation of radiation protection controls. During the period of December 31, 1981 through January 29, 1982, the inspector walked down the accessible portions of the Unit 2 Core Spray, Standby Liquid Control, 2A LPCI, 2/3 Diesel Generator, and Unit 2 Diesel Generator systems to verify operability. The inspector also witnessed portions of the radioactive waste system controls associated with radwaste shipments and barreling.

While conducting routine plant tours during this inspection period, the inspectors noted several locations with significant quantities of combustible materials accumulated in safety related equipment areas. Examples are: (1) On January 26, 1982, in the Unit 2 Emergency Diesel Generator room, loose papers, wood, and oil scattered around the room and engine foundation, plus a GI can without a lid, contained used oil filters, oil rags, papers, and plastic, (2) On January 27, 1982, in the Unit 2/3 Emergency Diesel Generator room, about 12 open oil drums with as much as several gallons of oil remaining in each barrel, an open refuse barrel overflowing with oily rags, papers, wipes, etc., plus considerable rags, wipes and oil were on the floor and work bench. In addition, there was evidence that individuals had been smoking in the area by the presence of numerous cigarette butts, burned matches and an empty match book on the floor. It was found that the combustibles in the Unit 2/3 Diesel Generator room were apparently left from maintenance work that had been conducted during the previous week. This is contrary to ANSI 18.7-1976, Section 5.2.10 which the licensee is committed to under their Quality Assurance Program. This is an item of noncompliance (50-237/81-38-01 and 50-249/81-31-01). A similar noncompliance (10/80-19-01; 237/80-21-01; and 249/80-25-01) brought about licensee corrective action in the form of a new administrative procedure DAP 3-11 which identified responsibilities for plant cleanliness. This is a significant breakdown in that corrective action.

Along with the combustibles left from maintenance and/or surveillance work, the inspectors noted access covers missing or out of place as follows on the Unit 2 Emergency Diesel Generator: access cover over the engine fly wheel unlatched and hanging open; a cover over a microswitch on the engine governor open and hanging by one screw; and the cover missing from an electrical junction box for engine exhaust RTDs. Each of these items by themselves may appear insignificant; however, they show evidence of carelessness in completion of work assignments and could lead to eventual personnel injury or degradation of exposed equipment. This concern of the inspectors was relayed to station management. The inspectors will follow licensee corrective actions. The station superintendent pointed out that this had been

previously identified independently by non NRC personnel. This is open inspection item (50-237/81-38-02) and (50-249/81-37-02).

One item of noncompliance was identified.

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.

4. 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 2

2/3 Emergency Diesel Generator

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

No items of noncompliance were identified.

5. Monthly Surveillance Observation

The inspectors observed technical specifications required surveillance testing on portions of the Unit 2 RBCCW Service Water Radiation Monitor and the High Steam Flow Isolation Surveillance 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.

No items of noncompliance were identified.

6. Unusual Event

The licensee declared an unusual event on January 19, 1982, upon detection of a release of airborne radioactive material on the refuel floor in the Reactor Building. The release occurred as a result of polishing the Unit 3 reactor vessel feed nozzles for feed sparger replacement. Initial indications showed release levels about three times the Technical Specification limit of 0.12 μC/sec. The licensee evacuated the Reactor Building, secured Reactor Building Ventilation, and started the Standby Gas Treatment system. The licensee also made the required notifications to the NRC and State of Illinois. Upon being informed by Region III management personnel, the SRI reported to the site and remained until the event was cleared. Later licensee actions were to verify that the Reactor Building air activity had returned to normal, and then to return the ventilation systems to normal. Licensee personnel then commenced decontamination of affected areas. Samples of snow, dirt, and air outside the site fence showed no indication of an offsite release. Later reevaluation by the licensee and consultation with Region III health physics personnel showed that the air activity did not exceed the allowable limits.

No items of noncompliance were identified.

7. Review of Plant Operations

During the period of December 31, 1981 through January 29, 1982, the inspector reviewed the following activities:

Training

The inspector attended one of the licensee's operator requalification lecture series and verified that lesson plan objectives were met and that training was in accordance with the approved operator requalification program schedule and objectives.

No items of noncompliance were identified.

8. Plant Trips

Following the plant trips of Unit 2 on January 26, 1982 the inspector ascertained the status of the reactor and safety systems by observation of control room indicators and discussions with licensee personnel concerning plant parameters, emergency system status and reactor coolant

chemistry. The inspector verified the establishment of proper communications and reviewed the corrective actions taken by the licensee. All systems responded as expected, and the plant was returned to operation on January 27, 1982.

No items of noncompliance were identified.

9. Refueling Activities

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 six shifts of the fuel handling operations 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.

The inspectors also walked down accessable portions of the following ECCS systems to verify operability.

Unit 3

Standby Liquid Control System
LPCI
Core Spray

No items of noncompliance were identified.

10. Surveillance - Refueling

The inspector observed the calibration of ARM surveillance testing on Unit 3 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.

11. Maintenance - Refueling

The inspector verified maintenance procedures include administrative approvals; 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; 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 3

Core spray spargers inspection
Fuel sipping
Fuel channeling
Calibration of water level indicators in the Control Room for feedwater sparger removal.
Steam separator removal

No items of noncompliance were identified.

12. 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 December 31, 1981 through January 29, 1982. The inspector verified surveillance tests required during the shutdown were accomplished, reviewed tagout records, and verified applicability of containment integrety. Tours of Units 1 and 3 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.

No items of noncompliance were identified.

13. Regional Requests

The resident inspector prepared and forwarded a Significant Occurence Report to Region III on the simultaneous inoperability of the High Pressure Coolant Injection system and one of the Electromatic Automatic Depressurization System valves. This event occurred on December 23, 1981, and was documented in a previous inspection report (50-237/81-37 and 50-249/81-29).

The resident inspector followed up on a Region III request to conduct a special inspection on the licensee's Prompt Public Notification/Warning System. The inspectors personally sited over 20% of the installed sirens. The inspectors also contacted CECo corporate personnel regarding the

capability and availability of this system. The results of the inspection were forwarded to Region III and will be issued in a special report by the Division of Emergency Preparedness or Operational Support.

During the inspection period, the Senior Resident Inspector and a Region III inspector conducted the Dresden portion of a lengthy investigation following up on allegations. The allegations pertained to operator training on Vice Presidents Instruction 1-0-17, offsite review of DVRs, scrams of unknown cause or numerous scrams from similar causes and approvals for restart; and LER corrective actions, steps to prevent recurrence and trending. Since the allegations were related to all CECo plants, a similar review was conducted at Quad Cities and Zion Stations. A final summary report will be forthcoming with the findings.

Region III requested followup by the resident inspectors to review fire doors installed at Dresden. This came about as a result of a recent situation where certification was unavailable for fire doors at the Kewaunee Nuclear Station. CECo personnel stated that fire protection doors at Dresden were manufactured by the James Walker Company, a subsidiary of Allied Fire Equipment Company of Chicago, which is not the manufacturer of the doors at Kewaunee, and that certification is available upon request.

14. Licensee Identified Items

The licensee reported finding a discrepancy in the timeliness of the installation of the Unit 2 Drywell continuous pressure recorder to meet TMI Task Action plan T.A.P. II-F-1.4. The pressure recorder was scheduled to be installed by January 1, 1982. However, it was combined in a modification package with the torus wide range level recorder whose delayed installation was reported to NRR by CECo letter dated December 15, 1981, to be completed by February 1, 1982. Immediately upon discovery of the discrepancy, the licensee took steps to complete the installation and report the item to the NRC.

The licensee reported identifying that the submission of the updated curvers (Technical Specification Figure 3.6.1) had not been submitted to the NRC prior to six effective full power years as required by Technical Specification 3.6.B.1. (The licensee did conduct a study with a consultant in 1979, and concluded that the curvers should remain the same for the next 10 to 16 years.) The apparent cause was delay in offsite review. Upon discovery, the licensee immediately submitted the updated information (TS Figure 3.c.1) to NRR. The inspector was also informed by CECo offsite review personnel that they were taking steps to prioritize and track items submitted for offsite review to prevent future occurence. This matter is similar to one of the allegations reviewed and addressed in Paragraph 13 of this report. Final resolution will be reviewed by the Region III team conducting the investigation of the allegations.

These are licensee identified items of noncompliance. In accordance with the Interim Enforcement Policy, 45 FR 66754 (October 7, 1980), Section IV.A, a Notice of Violation will not be issued for these licensee identified items of noncompliance which are of Severity Level V or VI. Corporate corrective action followup is being conducted by Region III personnel and conclusions will be presented in a separate report.

No other items of noncompliance were identified.

15. Bulletin Review

Based on the licensee's 180 day response dated November 30, 1981, to IE Bulletin No. 80-11, the inspector reviewed many of the walls not meeting the licensee's acceptance criteria. The licensee failed to determine if the failure of the walls not meeting the acceptance criteria joepardized the operability of any safety related system. The licensee is conducting a review to determine if the failure during a seismic event of these walls not meeting the acceptance criteria would affect the operability of systems or components. Based on a telecon between Region III DRPR personnel and CECo licensing personnel, the results of that review will be submitted to Region III within one month. This bulletin remains open.

No items of noncompliance were identified.

16. Exit Interview

The inspectors met with licensee representatives (denoted in Paragraph 1) throughout the month and at the conclusion of the inspection on January 22 and 29, 1982, and summarized the scope and findings of the inspection activities. The licensee acknowledged the findings of the inspection.