U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-010/81-14; 50-237/81-28; 50-249/81-21

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

License No. DPR-02, DPR-19, DPR-25

Licensee: Commonwealth Edison Company

Post Office Box 767 Chicago, IL 60690

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

Inspection At: Dresden Site, Morris, IL

Inspection Conducted: September 5 through October 2, 1981

Inspectors:

W. Reimann, Acting Chief,

Reactor Projects Section 1C

Inspection Summary

Inspection on September 5 - October 2, 1981 (Report No. 50-10/81-14; 50-237/81-28; 50-249/81-21)

Areas Inspected: Routine unannounced resident inspection of Operational Safety Verification, Monthly Maintenance Observation, Monthly Surveillance Observation, IE Bulletin Followup, Immediate Action Letter Followup, Plant Trips, Inspection during long-term shutdown, GSEP Drill and concerns of ex-security guards. The inspection included a total of 101 inspector-hours onsite by two NRC inspectors including 41 hours onsite during off-shifts. Results: Of the nine areas inspected, there were no items of noncompliance in eight areas, and one item of noncompliance (Failure to follow jumper and lifted lead procedure, Paragraph 2) in one area.

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
 - J. Brunner, Technical Staff Supervisor
 - J. Wujciga, Unit 1 Operating Engineer
 - J. Almer, Unit 2 Operating Engineer
- M. Wright, Unit 3 Operating Engineer
- J. Doyle, Q.C. Supervisor
- D. Adam, Waste Systems Engineer
- ★G. Myrick, Rad-Chem Supervisor
 - B. Saunders, Station Security Administrator
- B. Zank, Training Supervisor
- *E. Wilmer, Q.A. Coordinator

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 September 25 and October 2, 1981, and informally on several occasions throughout the report period.

2. Operational Safety Verification

- a. The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the period of September 5 through October 2, 1981. The inspector verified the operability of selected emergency systems, reviewed tagout records and verified proper return to service of affected components. Tours of Units 2 and 3 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.
- b. The inspector observed plant housekeeping/cleanliness conditions and verified implementation of radiation protection controls. During the period of September 5 through October 2, 1981, the inspector walked down the accessible portions of the Unit 2 and 3, HPCI, LPCI, Core Spray, and Standby Liquid Control systems to verify operability. The inspector 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 routine inspection of Control Room activities on September 25, 1981, the SRI conducted a verification of the Units 2 and 3 Jumper and and Lifted Lead Logs. A sampling of the log entries compared to the actual jumpers and lifted leads were not correct. The SRI noted several lifted leads or lifted connectors with caution cards and one set of thermocouple leads lifted in association with a tagged jumper, but with no identification.

The items found were as listed below:

Caution Tag Number	Information
II-20-81	Charcoal Absorber Radiation Monitor, lifted lead
III-12-79	Jumper between Recirculation loop temperature monitors OK. Lifted leads for the affected a thermocouple had no identification or caution card - corrected immediately by the SCRE.
III-25-81	Charcoal Absorber Radiation Monitors, lifted lead.

Items II-20-81; and III-25-81 were found in the respective unit Caution Card Log vice the Jumper and Lifted Lead Log as required. This is in noncompliance with the Commonwealth Edison "Quality Assurance Program for Nuclear Generating Stations" Topical Report, CE-1-A, January 1976, Revision 18, July 21, 1981, Section 5, Instructions Procedures, and Drawings which states, in part, "Generating Station operations, procedures and instructions will be provided by the Station Superintendent and will be included in the Station Procedures Manual in a timely manner consistent with NRC license requirements for administering the policies, procedures and instructions from the time that the operating license is issued through the life of the station. These procedures and instructions include: Administrative Procedures, ..."

Dresden Administrative Procedure DAP7-4, Revision 5, May 1981, states "This procedure provides guidance to assure that adequate control of the use of jumpers or lifted leads is maintained."

Contrary to the above, the items identified by the SRI were not listed in the Jumper and Lifted Lead Log as required. Independent interviews by the shift foreman, shift engineer and SCRE/STA confirmed the findings of the SRI.

This is an item of noncompliance (50-237/81-28-01, 50-249/81-21-01). During this report period, licensee personnel conducted a review of the applicable Caution Card Logs to identify other items that should be in the Jumper and Lifted Lead Log. There were several additional items found in addition to those found by the SRI. These items were listed in the Jumper and Lifted Lead Log as required and verified by the SRI.

In addition to those items listed in the citation, the Resident Inspector identified at least 12 leads in the panels with open lugs and no identification tags. These were found to be leads left from equipment removed for unit modifications, and were no longer of use. This was brought to the attention of station management personnel who agreed to have the lugs removed and the ends of the electrical leads taped as with past modifications. This will prevent confusing the leads with those that are intended for reuse. This is an open inspection item (50-237/81-28-02; 50-249/81-21-02).

During the inspection, Commonwealth Edison Company personnel identified and logged several discrepancies found with an outage on the 3A Reactor Feed Pump (RFP). After the outage tags had been placed and maintenance began, it was found that the suction valve was not fully shut although tagged as shut, the discharge valve was open with the breaker racked out and identified as shut, and no tag was available on the discharge valve control switch in the control room. The licensee found that the maintenance supervisor had not conducted a verification walk down of the outage prior to commencing work on the affected components. The Senior Resident Inspector expressed concern regarding this situation as it has recently resulted in other citations for similar problems with outage tag-outs, (see items 50-237/81-13-01; 50-249/81-02-01). If it were a safety-related outage it is recognized that the unit shift foreman would have conducted a walkdown verification of the outage prior to the start of work. In this occurrence, a minimum of three individuals including one from management, apparently missed the discrepancies. It is recognized that this is a nonsafety related system, and therefore noncitable, however, it is further evidence of a breakdown in managerial control of the outage (tag-out) system.

The licensee has subsequently conducted two meetings regarding this matter.

In exit interviews, the licensee was requested to make a statement regarding actions taken or planned to reinforce the apparent breakdown in management control of the outages. This is an open inspection item, (50-237/81-28-03, 50-249/81-21-03).

While reviewing changes to plant procedures, the resident inspector noted that the procedure for adjusting the APRM gains had been changed due to a modification of the Technical Specification (T.S.). This change was to increase the APRM gains by the ratio MFLPD/FRP in lieu of adjusting the APRM flux scram trip setting by the ratio of FRP/MFLPD, which accomplished the same degree of protection. However, a review of the T.S. change indicated that the change had been authorized for Unit 2 and had not been authorized for Unit 3. The procedure was issued applicable to both Units 2 and 3. This was brought to the attention of the Nuclear Engineer staff who issued a temporary procedure change restricting the new change for APRM gains adjusted to Unit 2 only. Discussions with Commonwealth Edison Company management indicated that they could not explain why the change was issued for both plants when only Unit 2 T.S.'s had been authorized to change. The licensee thought that both T.S.'s had been authorized the change. There appears to be a breakdown in the review committee's program, a noncompliance was not warranted as this appears to be an isolated occurrence.

The Resident Inspector also noted that when a temporary procedure change is issued, the parent procedure is not annotated as to the existance of a temporary procedure change. All temporary procedures for operations are stored in a single notebook on the Shift Control Room Engineer's (SCRE) desk. However, when an operator attempts to use an issued procedure, he may be unaware of an existing temporary procedure, unless he goes through the lists of existing temporary procedures for each procedure he uses. During an event, the operator may not have time to research the existance of a temporary procedure change for each procedure used.

The licensee was made aware of the inspector's concern and is in the process of developing and implementing a change whereby a procedure that is the subject of a temporary change is identified to the operators by some conspicuous means.

This is an open inspection item, (50-10/81-14-01, 50-237/81-28-04, 50-249/81-21-04).

One item of noncompliance was 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, 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 safety 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

HPCI Steam Line Repair

2A-CCSW Pump Repair

Unit 3

HPCI Steam Line Repair

Units 2 and 3

Diesel Generator

Reactor Building Crane Repair

Following completion of maintenance on the Unit 2/3 Diesel Generator and Unit 2 HPCI system, the inspector verified that these systems had been returned to service properly.

No items of noncompliance were identified.

4. Monthly Surveillance Observation

The inspector observed technical specifications required surveillance testing on the Unit 2 HPCI pump operability, 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 2 HPCI valve operability, Main Steam Radiation Isolation and Scram Calibration; Unit 3 Low Water Scram and Low Low Water Isolation Surveillance, LPCI valve operability, LPAM Calibration, HPCI valve operability.

No items of noncompliance were identified.

5. IE Bulletin Followup

For the IE Bulletins listed below the inspector verified that the written response was within the time period stated in the bulletin, that the written response included the information required to be reported, that the written response included adequate corrective action commitments based on information presentation in the bulletin and the licensee's response, that licensee management forwarded copies of the written response to the appropriate onsite management representatives, that information discussed in the licensee's written response was accurate, and that corrective action taken by the licensee was as described in the written response.

IE Bulletin 80-11 IE Bulletin 80-16

Masonry Wall Design (Open)
Potential Misapplication of Rosemont,
Inc., Models 1151 and 1152 Pressure
Transmitters with either "A" or "D"
Codes (Closed)

Regarding IE Bulletin 80-11, the Senior Resident Inspector received a combined Headquarters/Region III request as follows:

- a. Was the study completed to determine the seismic operability of masonry walls in the plant completed?
- b. If any of the walls did not meet the operability for a seismic event, was a 10 CFR 50.59 review conducted to determine if those walls that would affect safety related equipment?
- c. If safety related equipment would be affected, was a Technical Specification Licensee Event Report (LER) submitted?

By letter dated November 6, 1980, the licensee committed to have a restart analysis complete by July 1981, and a complete analysis and report by November, 1981.

Through interviews with licensee personnel, the inspector found that the analysis and review are in progress. The inspector informed the licensee of the questions of the IE-HQ/RIII request. This bulletin remains open.

No items of noncompliance were identified.

6. <u>Immediate Action Letter (IAL)</u>

The licensee received an IAL dated September 4, 1981, discussed in the previous inspection (50-237/81-24; 50-249/81-18). The IAL set forth items whereby the Unit 2 HPCI steamline would be analyzed for damage, examined by nondestructive testing, repairs made to damaged items (pipe hangers and whip restraints) and a long-term study performed to determine the cause. During the tests for damage to the HPCI steamline, several inches of water were detected at a horizontal portion that passes over the Torus. This was corrected by installation of a drain line that diverts the condensate from the low point of accumulation to a point down stream in the steamline for final drainage via the designed drain system. Initial studies by a licensee engineering contractor (E.D.S., Inc) and by Commonwealth Edison Company, found no damage to the steamline. After pipe hanger and whip restraint repair, and with the concurrance of Region III, the HPCI steamline was unisolated, heated up and tested by ultrasonic (UT) Technique for water accumulation with negative results. The HPCI was declared operable following a satisfactory surveillance test.

A similar condition was found on the Unit 3 HPCI steamline via UT where up to four inches of water were detected and minor or questionable whip restraint damage was found. The HPCI was declared inoperable, a steam line drain similar to Unit 2 installed, and the HPCI was tested and returned to service in about 5 days.

Presently, the licensee is visually examining the HPCI steam lines on both units for abnormal indications anytime the HPCI is operated and whenever the HPCI steam line containment isolation valves are operated. This will remain in effect until Commonwealth Edison Company provides the detailed study of the cause and effects of this event, which is being conducted by E.D.S., Inc. The study results and followup action with Region III concurrence are open inspection items (50-237/81-28-05, 50-249/81-21-05).

7. Plant Trips

Following the plant trips on Unit 2 on September 21 and September 23, 1981, and Unit 3 on September 26, 1981, 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 plants were returned to operation as follows: Unit 2 on September 23, 1981, and Unit 3 on September 26, 1981.

No items of noncompliance were identified.

8. 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 September 5 through October 2, 1981. The inspector verified that the surveillance tests required during the shutdown were accomplished, reviewed tagout records, and verified applicability of containment integrety. Tours of Unit 1 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.

9. GSEP Drill

On September 23, 1981, the licensee conducted an assembly drill that was observed by several Region III inspectors. On September 30, 1981, the licensee conducted its full scale annual GSEP drill in conjunction with their Chicago Response Center, State of Illinois, and Grundy County.

During the drill on September 30, 1981, the Resident Inspectors observed activities in the Control Room and T.S.C. The response of licensee personnel in the Control Room was excellent. The SCRE/STA, Operating Engineer, Shift Engineer, and Shift Foreman, and other personnel demonstrated good team work in problem solving, responsiveness, etc., and recommending corrective actions in anticipation of subsequent drill events. If the situation had been an actual event, they would have taken preventative steps prior to further degradation of the original event.

The details of the NRC Region III observations will be documented in IE Inspection Report 50-10/81-13, 50-237/81-26 and 50-249/81-19.

10. Concerns of Ex-security Guards

On several occasions during the inspection period, the SRI spent considerable time in telephone discussions with one of several guards who's employment had been terminated in April, 1981, for failure to meet firearms qualifications. Additionally, the SRI received copies of correspondence that had been sent from another ex-security guard to several members of the U.S. Congress and copies of the congressmen responses. In each case, the ex-guards correspondence expressed concerns that were found to be inaccurate or dissenting. These were or had been reviewed with licensee and NRC information and found that the licensee and/or the NRC had previously taken appropriate action. This information was forwarded to Region III Security Inspection Group for future reference if necessary.

11. Meetings, Training and Offsite Activities

The Resident Inspectors attended a Region III Resident Inspectors Seminar on September 17 and 18, 1981, in Mishicot, Wisconsin.

12. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) throughout the month and at the conclusion of the inspection on October 2, 1981, and summarized the scope and findings of the inspection activities. The licensee acknowledged the findings of the inspection.

in the NRC's Public Document Room. If the letter or enclosures contain any information that you or your contractors believe to be exempt from disclosure under 10 CFR 9.5(a)(4), it is necessary that you (a) notify this office by telephone within seven (7) days from the date of this letter of your intention to file a request for withholding; and (b) submit within twenty-five (25) days from the date of this letter a written application to this office to withhold such information. Section 2.790(b)(1) requires that any such application must be accompanied by an affidavit executed by the owner of the information which identifies the document or part sought to be withheld, and which contains a full statement of the reasons which are the bases for the claim that the information should be withheld from public disclosure. This section further requires the statement to address with specificity the considerations listed in 10 CFR 2.790(b)(4). The information sought to be withheld shall be incorporated as far as possible into a separate part of the affidavit. If we do not hear from you in this regard within the specified periods noted above, a copy of this letter, the enclosures, and your response to this letter will be placed in the Public Document Room.

We will gladly discuss any questions you have coming this inspection.

Sincerely,

R. L. Sperned

R. L. Spessard, Director Division of Resident and Project Inspection

Enclosures:

1. Appendix A, Notice of Violation

2. Inspection Reports
No. 50-010/81-14, No.
50-237/81-28 and No.
50-249/81-21

cc w/encls:
Louis O. DelGeorge
Director of Nuclear
Licensing
D. J. Scott,
Station Superintendent
DMB/Document Control Desk (RIDS)
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