

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-010/82-02; 50-237/82-03; 50-249/82-03(DETP)

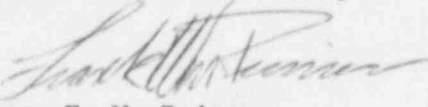
Docket Nos. 50-010; 50-237; 50-249 License No. DPR-02; DPR-19; DPR-25

Licensee: Commonwealth Edison Company
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Chicago, IL 60690

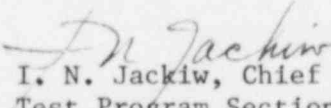
Facility Name: Dresden Nuclear Power Station, Units 1, 2, and 3

Inspection At: Morris, Illinois

Inspection Conducted: January 19 through February 18, 1982


Inspector: F. W. Reimann

9/21/82

Approved By: 
I. N. Jackiw, Chief
Test Program Section

9/21/82

Inspection Summary

Inspection on January 19 through February 18, 1982 (Reports No. 50-010/82-02; 50-237/82-03; 50-249/82-03(DETP)).

Areas Inspected: Routine, unannounced inspection conducted to evaluate licensee's followup on selected items which were identified by the NRC, and which require licensee followup action, including open items (OI), unresolved items (UI), and items of noncompliance. The inspection involved a total of 129 inspector-hours, including 19 inspector-hours during off shifts.

Results: Of the 12 areas inspected, no items of noncompliance were identified.

DETAILS

1. Persons Contacted

- *D. Scott, Station Superintendent
- *R. Ragon, Assistant Station Superintendent
- *D. Ferrar, Assistant Station Superintendent
- *J. Brunner, Technical Staff Supervisor
- *E. Wilmer, Quality Assurance Supervisor
- *J. Doyal, Quality Control Supervisor
- M. Dillon, Station Fire Marshall
- B. Saunders, Security Administrator
- J. Bowman, Radiation Protection Foreman
- D. O'Keefe, Radiation Protection Foreman
- R. Cimino, Radiation Protection Foreman
- V. Rockowzki, Shift Engineer
- T. Lang, Principle Engineer
- G. Tomlinson, Technical Staff Engineer
- J. McGee, Modification Coordinator
- R. Dyer, Technical Staff Engineer
- P. Markezich, Central Files Supervisor
- R. Potts, Nuclear Documents Clerk
- M. Wright, Unit 2 Operating Engineer
- S. Poole, Contractor Security Officer

The inspector also interviewed several additional licensee employees, including members of the station technical, engineering, operations, electrical, radiation protection, chemistry, and maintenance staffs, and contractor representatives involved in station outage work.

*Denotes those present at the exit interview conducted on February 18, 1982.

2. Followup of Inspector Identified Items, Unresolved Items and Open Items

(Closed) Open Item 50-237/82-02-04 and 50-249/82-02-04: The inspector verified that immediate repairs were completed to the outboard set of secondary containment access doors. A review of the licensee's procedures for controlling the use of this access indicates that adequate controls exist to prevent creating a condition potentially adverse to public health and safety.

(Closed) Open Item 50-237/82-02-03 and 50-249/82-02-03: Followup inspection of licensee control of fuel pool, separator dryer pool, and reactor cavity cleanliness during refueling indicate that adequate controls exist to prevent the intrusion of debris into the reactor vessel. The debris observed during a short period of time during initial flooding for refueling appears to have been a temporary condition which was promptly corrected.

(Open) Open Item 237/82-02-02 and 249/82-02-02: While inspecting unrelated items in the Units 2 and 3 Auxiliary Electrical Equipment Room, the new Halon Fire Suppression System was inadvertently actuated by the smoke and fumes normally associated with welding and cutting operations which were in progress for modification work.

The initiation forced evacuation of the room. An immediate evaluation of the situation by the inspector verified that the welding and cutting were being performed in accordance with procedures, and that a fire watch was assigned and present in accordance with procedures. It was also determined that the Halon system was bypassed (i.e., deactivated) in accordance with the procedures governing the work in progress. A later licensee investigation into the reason for the system's actuation when its controls were in the bypassed condition revealed that the BYPASS switch was not wired into the system control circuitry. The record drawings of the system circuitry, however, show this switch as being functional. This occurrence is considered significant in that the record drawings for the system did not agree with the as installed condition of the controls. The licensee was reminded that the operability of this equipment is not properly documented in the modification package for the equipment. Licensee employees responsible for the installation and operability of the equipment maintain that adequate testing was done, but that the documentation was lost. The discharged Halon cylinders were replaced with new ones, and the system was returned to service.

(Open) Open Item 237/78-23-03 and 249/78-25-03: Licensee representatives confirmed that no licensee action has been taken on this item to date.

(Open) Unresolved Item 237/79-11-01: The inspector verified that the licensee has incorporated appropriate steps in his Integrated Primary Containment Leak Rate Test Procedure (Type A test) to cause leakage, if any, associated with the High Drywell Pressure Switches to be included in the measured leakage. The item is left open because the procedure reviewed was a draft copy and had not received approval for implementation. Additionally, a question still exists within the licensee organization as to how to prevent the actuation of the pressure sensors (which will result when they are exposed to test pressure) from causing an ECCS initiation. The senior resident inspector will receive a copy of the final, approved procedure when it is issued in March, at which time this item can be closed out if the testing provisions for these pressure switches have not been changed. The inspector also verified that the subject procedure changes were incorporated for Unit 3 also.

(Closed) Open Item 237/80-17-02 and 249/80-21-02: The inspector reviewed modification package M12-3-80-1 which documents the modification of air piping (for those Automatic Depressurization System Relief Valves which have air piping) to withstand seismic events, as described in IE Bulletin No. 80-01. It was determined that the modifications were installed in accordance with adequately controlled design documents; that certification records exist for materials, processes, and welders who performed work; that testing and quality control inspections were

performed and documented; and that testing of the modification was performed.

(Open) Open Item 237/80-17-03 and 249/80-21-03: The inspector reviewed modification packages M12-2-80-33 (Unit 2) and M12-3-80-33 (Unit 3) in addition to a check of Unit 2 control room panels; a review of the operating, emergency, and surveillance procedures in the shift engineer's office; and interviews with operations personnel. As a result, it was found that modifications were installed to upgrade the operating logic circuitry for Isolation Condenser Valves 1301-1, 2 and 4 to conform to IE Bulletin No. 80-06 requirements, that appropriate procedure changes were implemented, and that operating personnel were cognizant of the changes. This item will remain open as a result of the fact that adequate documentation of design documentation used to install the modification, records of material certification, and records of drawing revisions used to prepare functional test procedures are missing from the modification documentation (action on the modification is closed out). This observation will be discussed further under Open Item 10/82-01-01, 237/82-02-01, and 249/82-02-01 in this report.

(Open) Open Item 10/82-01-01, 237/82-02-01, and 249/82-02-01: During the course of the inspection a substantial amount of time was spent reviewing documentation of modification efforts and work requests (which are used to perform modification work). During followup of Open Items 237/75-04-01, 249/75-04-01, 10/82-01-01, 237/82-02-01, 249/82-02-01, 237/80-17-03, 249/80-21-03, 237/81-09-02 (Inspection Report No. 50-237/82-02), and 249/81-06-02 (Inspection Report No. 50-249/82-02) it was found that work requests or modification packages are often closed out with required documentation missing. The inspector also notes that Inspection Report No. 50-010/77-33 documents the fact that documentation for testing of the replacement design Diesel Generator Cooling Water Pumps, which were installed per modification package 2-76-55, were lost and never replaced. As a result, it was not possible to refer to base line performance results during recent questions surrounding the operability of the Diesel Generator Cooling Water Pumps. Although sufficient details are not available as yet to accurately quantify the extent of the concern, it appears that the documentation problem appears most often when work is performed by contractors (both non-CECo and CECo organizations outside of the Dresden staff). The licensee concurs that documentation of work by contractors may be a concern.

An additional concern is the fact that administrative procedures for controlling work requests and modification packages, as well as the CECo Total Job Manual (TJM) which is the corporate manual for controlling work requests at all nuclear stations (and which is referenced by the administrative procedures, but not station approved per technical specifications) require comprehensive controls, documented by management, of preparation, implementation, testing, and documentation. In fact, management approvals are often made on the basis of statements such as "Install equipment per drawings" with no reference to appropriate drawings, or their revisions, design reviews,

or design documentation available. In some cases where documentation is missing the packages are signed off with or without notes stating that the information is missing. Apparently no attempt is made to retrieve the information. At this time, it is uncertain whether the documentation is missing or not retrievable because of the lack of a well coordinated system for collecting and storing documentation. In the case of design documentation for modification packages M12-2(3)-90-33 (Isolation Condenser, Open Item 237/80-17-03, 249/80-21-03) the required drawings were located by a conscientious nuclear records clerk using unofficial records which he keeps to make his job easier. Other records were not found during the inspection period.

These observations will be pursued by the resident inspectors and the next audit of the licensee QA program. The licensee acknowledges that weaknesses may exist in his system for documenting work accomplished by organizations other than station organizations.

(Closed) Unresolved Item 237/81-09-05 and 249/81-06-05): The inspector audited several yard hose houses to verify that the licensee's changes to fire protection practices initiated as a result of this item were satisfactorily and properly implemented. Three yard hose houses were chosen at random. At each of the houses the inspector found an engraved sign securely fastened to the house door. The signs designated the quantity and types of equipment required to be stored in that house.

Each house contained at least the minimum type and quantity of required equipment, they were clean and well arranged, equipment was easy to locate, properly stored, and appeared to be in good working condition. The hose houses did not appear to contain stored equipment which did not belong in them.

(Open) Open Item 237/79-13-02 and 249/79-11-02: The inspector reviewed the modification package for this modification and interviewed members of the licensee staff responsible for completing the work. The licensee is attempting to procure the parts necessary, including closure springs, to complete the work. At this time he is investigating the possibility of having the parts fabricated because they are either not available from the vendor, or cannot be supplied with adequate certification. If this alternative is not successful, the valves and/or operators will be replaced.

(Open) Open Item 237/78-20-01: The licensee stated that the modification is complete for Unit 2 and that the Unit 3 work will be completed during the ongoing outage. Open Item 249/82-03-04 is being assigned to track this modification for Unit 3.

3. Independent Inspection Effort

- a. On February 3, 1982, the inspector observed an employee of a licensee contractor commit what appears to be a violation of station security procedures. The inspector immediately reported the individual's identity to the station guard force and verified

that appropriate followup action and reporting requirements were adhered to. The details of the event were then reported to the regional security experts for resolution. This is an unresolved item (237/82-03-01, 249/82-03-01).

- b. On January 22, 1982, the inspector discovered a pair of white canvas gloves with the stencil "SWP" (for use in contaminated areas) on them laying in the snow in the walkway between the Access Control Building and the Guard House, and immediately adjacent to the Resident Inspector's Office. Licensee radiation protection personnel were notified immediately. They promptly placed the gloves in a plastic bag and brought them to the radiation protection office for counting. The gloves produced a beta-gamma reading of 3,000 to 5,000 counts per minute (cpm) when surveyed through the plastic bag. It was not known how the gloves got out of the licensee's controlled area. This may constitute a violation of the licensee's procedures for release of items from the radiologically controlled plant areas. This is an unresolved item which will be reviewed further by a regional radiation specialist during a future inspection (010/82-02-01; 237/82-03-02; 249/82-03-02).

Two additional potential radiological problems were noted. The inspector conducted a survey of several station areas where work was in progress and noted that SWP gloves, and to a lesser extent, other articles of SWP clothing were in common use in areas where radioactive contamination precautions were not in force. More than 30 instances of such use were discovered in almost all parts of the Units 2 and 3 reactor and turbine buildings. In addition the inspector observed that two workers who set off the guard house radiation monitor did not resurvey themselves to determine the extent of their contamination nor were they stopped by licensee personnel (a radiation control technician and a security guard) stationed near the monitor. These matters will be reviewed further by regional radiation specialists during future inspections (010/82-02-04; 237/82-03-04; 249/82-03-04).

- c. During the period of February 19 through 21, the inspector noted several concerns regarding the cleanliness of Units 2 and 3. It is understood that Unit 3 is in a refueling outage and accordingly it cannot be continuously maintained at operating cleanliness levels. However, housekeeping problems which could reduce safety of operations for the operating Unit 2 are primarily addressed here. Of particular concern is the general littering of the 2 and 2/3 diesel generator rooms with debris including oil soaked wipers, rags, and wood; open trash cans filled to overflowing with used oil filters, wipers, and general debris, cigarettes and cigar butts, and a glass container of fuel oil on an electrical junction box. The resident inspector joined the inspector for a tour. As a result, the noncompliance for housekeeping practices will be in the February resident inspector's inspection report.

A second cleanliness concern in the control room was brought to the attention of station management. The concern surrounds the ability of control room operators to accurately determine plant conditions as a result of oil, tape gum, ink, dirt, etc. reducing the visibility through instrumentation windows, especially GEMAC strip chart recorders. Licensee management committed to tour the control room and take remedial action.

- d. The inspector noted that the air start line for the Unit 2 Diesel Generator does not appear to be adequately supported to withstand seismic loads, in that it could easily be shaken by the inspector with his hand. A check of the Unit 3 Diesel Generator revealed that its air start line is routed differently and appears to be well supported. Licensee management initiated a work request to stiffen the Unit 2 air start line upon notification of this condition. This item will be turned over to the Region III engineering inspection function for followup of the licensee's fix (237/82-02-03, 249/82-02-03).

The inspector had an additional concern surrounding the consequences of a potential for failure of an unsupported run of approximately 25 feet of 3/4" copper tubing between an existing drain from the bottom of the engine oil sump and the engine exhaust manifold. Licensee research on the function of this tubing, corroborated by inspector observations on the Unit 3 Diesel, which was disassembled for overhaul, identified the tube as a drain for the scavaging air box. No identifiable adverse effects would result from its failure.

- e. The inspector observed the ongoing Unit 3 in-vessel work for removing the stainless steel cladding from the reactor vessel feedwater safe ends. The effort appeared to be well coordinated with adequate supervision, radiation protection, and procedural controls.

4. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) throughout the period of the inspection and at the conclusion of the inspection on February 18, 1982. The scope and findings of the inspection were summarized at these meetings. The licensee acknowledged the findings documented herein.