

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-341/85021(DRP)

Docket No. 50-341

Operating License No. NPF-33

Licensee: Detroit Edison Company
2000 Second Avenue
Detroit, MI 48226

Facility Name: Fermi 2

Inspection At: Fermi Site, Newport, MI

Inspection Conducted: April 7-30, 1985

Inspectors: P. M. Byron

M. E. Parker

D. C. Jones

Approved by: *N. J. Chrissotimos*
N. J. Chrissotimos, Chief
Projects Section 1D

5-20-85
Date

Inspection Summary

Inspection on April 7-30, 1985 (Report No. 50-341/85021(DRP))

Areas Inspected: Routine, unannounced inspection by resident inspectors of licensee action on previous inspector identified items; regional requests; independent inspections; preoperational test witnessing (recirculation system flow control test and containment isolation valve); operational safety verification; monthly maintenance observation; monthly surveillance observation; and surveillance--initial fueling. The inspection involved a total of 283 inspector-hours onsite by three NRC inspectors, including 59 inspector-hours onsite during off-shifts.

Results: Of the eight areas inspected, no items of noncompliance or deviations were identified in seven areas. Within the remaining area, one item of noncompliance was identified (Paragraph 2.b. - failure to follow procedures).

DETAILS

1. Persons Contacted

- *F. Agosti, Manager, Nuclear Operations
- *L. Bregni, Licensing Engineer
 - J. DuBay, Director, Planning and Control
 - O. Earle, Supervisor, Licensing
 - R. Eberhardt, Rad-Chem Engineer
- *E. Griffing, Assistant Manager, Nuclear Operations
- W. Holland, Vice-President, Fermi 2 Project
- *W. Jens, Vice-President, Nuclear Operations
 - S. Leach, Director, Nuclear Security
 - J. Leman, Maintenance Engineer
- *L. Lessor, Assistant to the Superintendent
- *R. Lenart, Superintendent, Nuclear Production
 - R. Mays, Director, Project Planning
- *W. Miller, QA Supervisor, Operational Assurance
 - J. Nyquist, Assistant to Superintendent, Nuclear Production
- *G. Overbeck, Assistant Plant Superintendent, Startup
 - J. Piana, Director, Nuclear Administration
 - J. Plona, Technical Engineer
 - E. Preston, Operations Engineer
 - W. Ripley, Startup Director
 - C. P. Sexauer, Nuclear Production Administrator
- *G. Trahey, Director, Nuclear QA

*Denotes those who attended the exit meetings.

The inspectors also interviewed others of the licensee's staff during this inspection.

2. Followup on Inspector Identified Items

- a. (Open) Open Item (341/84039-01(DRP)): Accessibility of valves for serviceability and manual operation of safety-related valves during abnormal conditions. This item identified numerous safety-related valves that would require mobile platforms to operate, inspect, and maintain the valves. The licensee is currently reviewing the accessibility of valves that require manual operation during emergency conditions and the ALARA considerations as recommended in Regulatory Guide 8.8.

Pending further review by the inspectors, this item remains open.

- b. (Closed) Open Item (341/84053-03): This item has been determined to be an item of noncompliance. On November 30 and December 1, 1984, the inspectors noted that one penetration test connection (T46-F009) was not capped. Test connections must be administratively controlled to ensure their leak tightness or otherwise be subject to Type C testing. In response, the licensee issued an Engineering Design Package, EDP-1996, with the intent to:

- 1) Identify those connections that required caps.
- 2) Perform a production check to determine if caps are installed and if no cap is presently installed, install caps per the guidelines of this EDP.
- 3) Update the drawings identified in this EDP to show caps where required.

Although the EDP is to be followed as a procedure for installation and verification of these caps, the Engineering Change Request, ECR-1996-2, that was written to delete four and add two TVD caps, was not implemented into the verification sheet resulting in the omission of vents E11-F091 and E41-F151. The inspector, by visual observation, found one of these two vents (E41-F151) was uncapped. Also, upon review of POM Procedure 47.000.77, "Test, Vent, and Drain (TVD) Cap and Plug Verification," the inspector found that penetration X-220 was omitted from the procedure's verification sheet. This resulted in the absence of eight vents from this procedure. This is considered an item of noncompliance (341/85021-01(DRP)) with the requirements of 10 CFR 50, Appendix B, Criterion V, in that there was inadequate implementation and review of EDP-1996 and the accompanying Engineering Change Requests (ECR), which is a failure to adhere to administrative procedures, specifically Plant Operations Manual (POM) Procedure 12.000.64 "EDP Implementation Procedure."

One item of noncompliance was identified.

3. Followup on Regional Requests

The inspectors were requested to review the licensee's program for complying with licensed operator staffing as a result of recent problems involving reactor operators at other facilities.

The inspectors reviewed the licensee's procedure POM 21.000.01, "Shift Operations and Control Room," Revision 10, to determine if the licensee was complying with 10 CFR 50.54(k) and 50.54(m) requirements concerning licensed operator and senior operator staffing and shift manning. The inspectors' review determined that the licensee's procedure does comply with these requirements and that the licensee is currently implementing these procedure requirements. The licensee is also meeting the guidelines of Regulatory Guide 1.114, "Guidance on Being Operator at the Controls of a Nuclear Power Plant," and has provided a sketch in their procedure clearly defining "at the controls." The inspectors have also reviewed different aspects of operator staffing as a result of verifying implementation of TMI requirements in the Safety Evaluation Report as addressed in Inspection Report 50-341/85013(DRP).

No items of noncompliance or deviations were identified in this area.

4. Independent Inspections - Operational Readiness

The inspectors and Region III management met with licensee management on April 16, 1985, to review the licensee's readiness for issuance of the full power license and the status of the license condition items. The meetings will be held biweekly until the issuance of the full power license with the next meeting scheduled for May 3, 1985.

The inspectors continue to review the licensee's operational readiness in preparation for the issuance of the full power license. The licensee's ability to respond in a timely manner is perceived by the inspectors as an area in which they need to devote additional effort. The inspectors continue to observe vestiges of attitudes which were prevalent during the construction phase. Various organizations work within their own sphere which results in minimized inter-organizational communication. Each organization develops its own set of procedures, rules, and ways of doing business. Individualistic approaches do not foster a sense of teamwork. There has been a drastic improvement in this area but it has been due primarily to the demobilization of various organizations and not as a result of management attention.

The inspectors have observed that the Operations, Maintenance and Modification groups all utilize PN-21's (work orders) yet have their own data base, language, and cross referencing data. Reports generated by each organization are not compatible with the needs of the others. This is a contributor to the inter-organizational problems that the inspectors have observed. The inspectors consider that the use of a single data base would enhance communications between organizations.

The licensee needs to take action to improve inter-organizational communications. The inspectors consider that a solution to the communication issue should result in a more cohesive organization which in turn will aid in the licensee's ability to respond to problems. The inspectors have discussed their concerns with licensee management.

No items of noncompliance or deviations were identified in this area.

5. Preoperational Test Witnessing

The inspectors reviewed portions of preoperational test procedures, reviewed procedure results completed to date, toured the areas containing system equipment, interviewed personnel, and observed test activities of those preoperational tests identified below.

During this review, the inspectors noted that the latest revision of the test procedure was available and in use by crew members, the minimum crew requirements were met, the test prerequisites were met, appropriate plant systems were in service, the special test equipment required by the procedure was calibrated and in service, the test was performed as required by approved procedures, temporary modifications such as jumpers were installed and tracked per established administrative controls, and test results for the tests observed by the inspectors indicated that acceptance criteria were met.

a. Recirculation System Flow Control Test

The inspectors observed the performance of portions of Preoperational Test PRET B3100.001, Revision 2, "Reactor Recirculation System": Initial Pump Operation Test and Two-Pump Operation.

b. Containment Isolation Valve

The inspectors observed the performance of portions of Preoperational Test PRET T4804.000, Revision 2, "Thermal Recombiner System": Division I Logic Verification and Division II Logic Verification.

No items of noncompliance or deviations were identified in this area.

6. Operational Safety Verification

The inspectors observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the period from April 7 to April 30, 1985. The inspectors verified the operability of selected emergency systems, reviewed tagout records, and verified proper return to service of affected components. Tours of the reactor building, turbine building, and RHR complex 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.

During the inspection period while the reactor was in a maintenance outage, the inspectors verified that surveillance tests were conducted, secondary containment integrity requirements were met, and emergency systems were available as necessary.

The inspectors, by observation and direct interview, verified that the physical security plan was being implemented in accordance with the station security plan.

The inspectors observed plant housekeeping/cleanliness conditions and verified implementation of radiation protection controls. During the inspection, the inspectors walked down the accessible portions of the Core Spray System and the Low Pressure Coolant Injection System to verify operability by comparing system lineup with plant drawings, as-built configuration or present valve lineup lists; observing equipment conditions that could degrade performance; and verified that instrumentation was properly valved, functioning, and calibrated.

The inspectors reviewed new procedures and changes to procedures that were implemented during the inspection period. The review consisted of a verification for accuracy, correctness, and compliance with regulatory requirements.

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.

No items of noncompliance or deviations were identified in this area.

7. Monthly Maintenance Observation

Station maintenance activities of safety related systems and components listed below were observed 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:

- 24/48 VDC Battery Replacement
- Removal/Installation of Control Rod Drives
- Control Rod Drive Rebuild
- Position Indicator Probe Changeout

No items of noncompliance or deviations were observed in this area.

8. Monthly Surveillance Observation

The inspectors observed surveillance testing required by technical specifications and verified that: testing was performed in accordance with adequate procedures; test instrumentation was calibrated; limiting conditions for operation were met; removal and restoration of the affected components were accomplished; test results conformed with technical specifications and procedure requirements and were reviewed by personnel other than the individual directing the test; and any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel.

The inspectors witnessed portions of the following test activities:

- Pre and Post CRD Removal Verification
- Division I/Division II 130 VDC Battery Charger Calibration

No items of noncompliance or deviations were identified in this area.

9. Surveillance - Initial Fueling

The inspectors observed the following surveillance testing conducted during initial fueling to verify that: the tests were accomplished in accordance with properly approved procedures; the procedures used were consistent with regulatory requirements, licensee commitments, and administrative controls; 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; the qualifications of personnel conducting the test were adequate; and the test results were adequate.

Shutdown Margin Demonstration
Control Rod Drive Friction Testing
Control Rod Drive Timing Tests

No items of noncompliance or deviations were identified in this area.

10. Open Items

Open items are matters which have been discussed with the licensee, which will be reviewed further by the inspector, and which involve some action on the part of the NRC or licensee or both. Open items reviewed during the inspection are discussed in Paragraph 2.

11. Exit Interview

The inspectors met with licensee representatives (denoted in Paragraph 1) on April 29, 1985, and informally throughout the inspection period and summarized the scope and findings of the inspection activities. The inspectors also discussed the likely informational content of the inspection report with regard to documents or processes reviewed by the inspectors during the inspection. The licensee did not identify any such documents/processes as proprietary. The licensee acknowledged the findings of the inspection.