U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-341/84-48(DRS)

Docket No. 50-341 License No. CPPR-87

Licensee: Detroit Edison Company
2000 Second Avenue
Detroit, MI 48224

Facility Name: Enrico Fermi Nuclear Power Plant, Unit 2

Inspection At: Enrico Fermi 2 Site, Monroe, Michigan

Inspection Conducted: October 22-26, November 2 and November 5-9, 1984

Inspectors: W. Kropp — Date: 11/30/84

M. Moser — Date: 11/30/84

R. Hasse (In-Office) — Date: 11/30/84

R. Westberg (In-Office) — Date: 11/30/84

Approved By: F. Hawkins, Chief
Quality Assurance Programs Section — Date: 11/30/84

Inspection Summary

Inspection on October 22-26, November 2 and November 5-9, 1984 (Report No. 50-341/84-48(DRS))
Areas Inspected: Routine, announced inspection by regional inspectors of licensee activities in the areas of auditing, receipt inspection, storage, document control, procurement, QA/QC administration records, preoperational test program records, licensee action on previous inspection findings, and a 10 CFR 50.55 item. The inspection involved a total 122 inspector-hours onsite by two inspectors and six inspector-hours in the Region III office.
Results: Of the eight areas inspected, one item of noncompliance was identified (Criterion VI - failure to approve procedures prior to use - Section 3.b.). Of the 28 findings reviewed for licensee actions on previous findings, 28 were closed. The 10 CFR 50.55e item reviewed was closed.

DETAILS

1. Persons Contacted

Detroit Edison Company

*W. H. Jens, Vice President, Nuclear Operations
*R. S. Lenart, Superintendent, Nuclear Operations
*L. P. Bregni, Licensing Engineer
*M. Gavin, General Supervisor, Information System
*G. M. Trahey, Director, Nuclear QA
S. E. Kremer, General Supervisor, Nuclear Operations
*T. G. Byrd, Supervisor, QA
S. E. Martin, Engineer, Licensing
*F. Schwartz, Supervisor - Staff QA
*J. Tsai, NE-SPA
*V. Reynaud, NE-SPA
*W. Fahrner, Manager, Fermi 2
*S. Noetzel, Assistant Manager, Fermi 2

Other Personnel

*P. M. Byron, Senior Resident Inspector, Region III

*Denotes those attending the exit interview on November 9, 1984.

Other personnel were contacted as a matter of routine during the inspection.

2. Action on Previous Inspection Findings

a. (Closed) Unresolved Item (341/84-22-01): The Regulatory Guide and ANSI standard commitment in the Operation Quality Assurance Manual were inconsistent with commitments in the Fermi 2 FSAR, Appendix A. A review of the Operational Quality Assurance Policies (OQAP) 2, "Quality Assurance Program", Revision 2, dated September 10, 1984, determined the Operational QA Manual is now consistent with the commitments to the Regulatory Guides and ANSI standards.

b. (Closed) Open Item (341/84-25-01): Vendor manual control. The vendor manual control program and implementation schedule was reviewed. The inspector was satisfied that an adequate program had been implemented.

c. (Closed) Open Item (341/84-25-03): Maintenance program implementation. This item involved the inspection of maintenance program implementation during plant operation. The item will be tracked via the Region III inspection program.

d. (Closed) Open Item (341/84-32-01): The Nuclear Operations Management Plan (NOMP) did not contain all the requisite requirements of the Quality Assurance Program Requirements (QAPR) manual and Nuclear Operations Program (NOP) manual which were required to implement the operational quality assurance program. The inspector reviewed OQAP 2, "Quality Assurance Program", Revision 2, and determined that the QAPRs and NOPs applicable to the operational quality assurance program had been identified. A further review of NOMP determined that the applicable QAPRs and NOPs had been issued.

e. (Closed) Open Item (341/84-32-02): An independent third party determined that 30 to 40 percent of the requirements of ANSI N18.7-1976 were not addressed in the NOMP. The inspector selected several QAPRs issued on September 10, 1984, and verified that the requirements of ANSI N18.7-1976 were addressed. Based on this review of several QAPRs, the inspector is satisfied that the NOMP addresses the requirements of ANSI N18.7-1976.

f. (Closed) Open Item (341/84-32-03): Lack of attention to detail during the review process of procedures. The inspector reviewed the implementing procedures for auditing, receipt inspection, storage, procurement and the offsite review group and determined that these procedures address proper interface with other procedures and are consistent with regulatory requirements, the NOMP, and applicable codes and standards. Based on the review of these implementing procedures, the inspector is satisfied that the licensee is performing satisfactory procedural reviews.

g. (Closed) Noncompliance (341/84-32-04): Failure to take prompt corrective action on a previous NRC finding pertaining to the shelf life program. The inspector reviewed Maintenance Instructions, MI-M239 ("Identification and Implementation of Shelf Life Requirements") and MI-245 ("Criteria for Technical Review") and determined that sufficient controls are now in place to control the issuance of items with a shelf life.

The inspector also reviewed the licensee's action concerning the issuing of items with limited shelf life since September, 1983. The action consisted of identifying items with limited shelf life and then reviewing their inventory cards to determine if any items were issued beyond their shelf life. As a result of this review, the licensee identified six items with expired shelf lives. The licensee had tagged these items in accordance with MI-M239 and performed a technical review to disposition each. Based on the two Maintenance Instructions and the licensee's review of shelf life items issued since September 18, 1983, the inspector is satisfied with the licensee's action.

h. (Closed) Noncompliance (341/84-32-05): Failure to accomplish trending activities in accordance with procedure NQA 1602. The inspector reviewed the licensee's trending activities and determined that procedure NQA 1602 was being implemented. The trending program has commenced with the codification of nonconformance

documents (i.e., audit findings, surveillance findings, and CARs). The first monthly summary report was in the process of being issued. Based on the codification of the nonconformance documents and the inputting of the data base into the computer, the inspector is satisfied that the licensee is implementing the requirements of procedure NQA 1602.

i. (Closed) Unresolved Item (341/83-31-01): Audit coverage of site contractors was minimal. During 1984, audits of onsite contractors have been conducted on Sussman, Wismer and Becker, WACO and Bechtel. Twelve supplemental audits have either been performed or planned for 1984. The inspector reviewed the Master Audit Schedule and found it to be comprehensive. The inspector is satisfied that a comprehensive audit schedule for completion of turnover and operation activities exists to ensure adequate audit coverage.

j. (Closed) Unresolved Item (341/83-32-02): The review of the Audit Finding and Status Sheet revealed instances where several audit findings appeared to occur repeatedly over a period of time. The licensee reviewed the Audit Finding and Status Sheet and determined there were no trends. The inspector concurs with this conclusion.

k. (Closed) Noncompliance (341/83-31-03): Failure to maintain sufficient records to furnish evidence of the qualification of personnel. The inspector reviewed the qualification/certification files of four licensee QC inspectors and determined that there were sufficient records to substantiate their certification. Each inspector's certification was amended by an attachment which identified the specific basis for certification.

l. (Closed) Nonconformance (341/83-31-04a & 4b): Failure of the mechanical site contractor to implement a comprehensive system of planned and periodic audits and the failure of licensee to perform adequate followup on an audit finding. The inspector reviewed the revised audit schedule, issued on February 2, 1984, for the mechanical site contractor. The audit schedule represented a comprehensive audit plan.

The inspector reviewed audits conducted by the site contractor on February 29 and June 29, 1984, to verify implementation of the audit schedule. The inspector also reviewed surveillance, QSR No. 84007, conducted by licensee QA personnel to verify that adequate followup was conducted on audit finding 83-07-01D.

m. (Closed) Open Item (341/83-31-05): The mechanical site contractor audits did not appear to be adequate in either scope or depth. The inspector reviewed audits conducted on February 29 and June 29, 1984, by the mechanical site contractor and found them to be adequate in both scope and depth. The audits were full scope audits of the mechanical site contractor's ASME program.

n. (Closed) Unresolved Item (341/83-31-08): Procedurally, the potential existed for final inspections of installed hardware to be against an interim approved design change. Procedures have been revised to state that if an inspection is performed using a verbal approved copy of a design change document, the final approved design change document is compared to the verbal approved document prior to final acceptance.

o. (Closed) Noncompliance (341/83-31-12a): Failure to establish and execute an adequate training program for site mechanical contractor supervisory personnel. The licensee performed an audit of all active site contractors to determine if adequate indoctrination and training programs were being implemented. The inspector reviewed the audit (A-CQ-P-84-04) and found its contents acceptable. The inspector also reviewed the site mechanical contractors training matrix revised on November 30, 1983, and found it acceptable.

p. (Closed) Noncompliance (341/83-31-14a): Failure of site mechanical contractor to document nonconforming conditions in accordance with the established system. The site mechanical contractor revised procedure WB-Q-113 to prohibit the use of surveillance reports to document hardware deficiencies for safety-related items.

(Closed) Noncompliance (341/83-31-14b): Failure to generate a Supplemental Operation Process Traveler to replace a valve seat on a 24" purge piping valve. The site mechanical contractor initiated DDR 13010 to document the fact that a Supplemental Operation Process Traveler had not been used to replace the valve seat. The DDR was dispositioned "use-as-is" because the acceptability of the work done on the valve was verified by a QC inspector and documented on Surveillance Report A2786. The licensee reviewed all Work Assignment Travelers (WATs) issued since the inception of the traveler system (approximately 1850). This review identified 19 that required, but did not include, Operation Process Travelers. These 19 items were documented on DDRs and have been subsequently dispositioned and closed.

q. (Closed) Unresolved Item (341/83-31-15): Four surveillance reports identified certain nonconforming conditions which appeared not to be properly dispositioned. The first two surveillance reports (2768 and 2787) identified erratic indicators on torque wrenches. An NCR 84-1600 was issued to identify the deficiencies. The NCR was dispositioned as "rework" and required a sampling (as defined on DECo letter EF2-63-281) of those items torqued with the erratic torque wrenches. The third surveillance report (3518) identified what appeared to be an untraceable heat number on 1½" schedule 40 pipe. The inspector reviewed the Bill of Material used by QC personnel during inspection to document the heat numbers and determine that the pipe in question was traceable to a valid heat number. The fourth surveillance report (3187) identified clamp bolts and nuts for a main steam valve discharge pipe as heavily rusted and untraceable. The licensee replaced these bolts and nuts after determining that they were not traceable to the correct material specification.

r. (Closed) Nonconformance (341/83-31-16a): Failure to install the foundation bolts for the standby liquid control storage tank in accordance with procedural and drawing requirements. The foundation bolts for the standby liquid control storage tank were inspected by the licensee and documented on surveillance report 84010. Nonconformance reports were issued to document and evaluate one bolt for lack of sufficient thread engagement and the lack of verification that the bolt had been properly torqued. The suspect bolt was torqued and the lack of thread engagement was dispositioned "use-as-is".

(Closed) Nonconformance (341/83-31-16b): Failure to secure the standby liquid control storage tank cover in accordance with a startup instruction. Process traveler No. 22446 was issued to clean the tank interior and secure the manway bolts. After completion of the preoperational test and prior to final closure, the tank will be reinspected and cleaned if required.

(Closed) Nonconformance (341/83-31-16c): Failure of the site mechanical contractor to review equipment documentation packages prior to the turnover of the equipment to DECo. All equipment documentation stored in the records storage area has been reviewed and accepted by the site mechanical contractor. The site mechanical contractor was demobilized in August, 1984. Licensee QA personnel are reviewing turnover packages by sampling 72 items in each package to verify that the site mechanical contractor's documentation packages are complete and acceptable.

s. (Closed) Unresolved Item (341/83-31-17): Equipment packages were not reviewed by the site mechanical contractor. The site mechanical contractor has been demobilized and all equipment documentation stored in the records storage area was reviewed and accepted by the contractor's QA personnel. Licensee QA personnel are reviewing turnover packages by sampling 72 items in each package to verify that the site mechanical contractor's documentation packages are complete and acceptable.

t. (Closed) Noncompliance (341/83-31-18b): Failure to take prompt and effective corrective action with regard to NRC item of noncompliance No. 341/82-10-04. The licensee contracted an independent third party to audit Fermi 2 construction quality assurance program. The responsibility and methods for management to assess the status and adequacy of the operation quality assurance program has been established in procedures.

u. (Closed) Unresolved Item (341/83-31-20): It appeared there was no systematic corrective system in use for approximately 18 months. Procedure NQAP 1605, "Corrective Action Request (CAR)", was issued on January 13, 1984. The lack of CARs being issued for 18 months was a result of the transition of the QC inspection function from Daniel to the licensee. Deficiencies requiring corrective action were reported by the licensee on surveillance findings.

v. (Closed) Unresolved Item (341/84-31-21): A Type II design change was implemented by means of a verbal approved DCR which was subsequently disapproved by engineering. No corrective action had been taken. An unscheduled surveillance was performed to ensure that work done to a verbally approved DCR was in accordance with the final approved design change. The surveillance determined that there were 20,783 DCRs issued as of January 24, 1984. Of the 900 DCRs reviewed, 32 had changes which were made after being verbally approved. Of these 32 DCRs, four were questionable as to whether or not the changes were minor. A review of the installation documentation determined that the latest configuration agreed with the approved DCRs. The inspector is satisfied that the verbally approved DCRs were adequately controlled.

w. (Closed) Open Item (341/84-25-05): Suppression pool inspection acceptance criteria. The licensee has revised the inspection procedure to require that discrepancies noted during the inspection be resolved through the deviation and corrective action reporting program if they cannot be resolved by the maintenance engineer and shift supervisor. The inspector is satisfied that this will ensure adequate assessment of inspection findings.

x. (Closed) Open Item (341/84-25-06): Inconsistencies between the technical specifications and surveillance procedures. The inspector reviewed the revised procedures and the latest draft of the technical specifications. The inconsistencies have been resolved.

y. (Closed) Open Item (341/84-25-08): Implementation of the tests and experiments program. This item will be tracked via the Region III inspection program.

*z. (Closed) Open Item (341/84-25-09): Implementation of the design change program. This item will be tracked via the Region III inspection program.

*aa. (Closed) Open Item (341/84-25-07): Failure to completely address Technical Specification 6.7 in the On-Site Review Organization (OSRO) implementing procedure. The licensee has revised the subject procedure to address the means used by the OSRO to review normal operations to detect potential hazards to nuclear safety.

**bb. (Closed) 50.55(e) Item (341/84-09-EE) (117): Commercial Grade Replacement Parts in QA-I applications. The inspector reviewed the final report, dated September 18, 1984, and found it to be acceptable. The DECo CQ program and its implementation was previously found acceptable in Region III Inspection Report No. 50-341/83-31(DRS).

* These findings discussed by NRC Inspector R. Hasse with licensee personnel in the Region III office on November 2, 1984.

** This finding reviewed by NRC Inspector R. Westberg in the Region III office.

3. Functional or Program Areas Inspected

The purpose of this inspection, in addition to evaluating the licensee's actions on previous findings, was to verify that the operational quality assurance program and implementing procedures were in compliance with 10 CFR 50, Appendix B, ANSI N18.7-1976 ("Administrative Control and Quality Assurance for the Operational Phase of Nuclear Power Plants") and other applicable codes and standards. The specific areas reviewed during this inspection included the audit program, receipt inspection, the storage of items, QA records, document control, preoperational test program QA records, procurement, and QA/QC administrative activities.

a. Documents Reviewed

(1) QAPR-4, "Procurement Document Control", Revision 1
(2) QAPR-7, "Control of Purchased Material, Equipment, and Services", Revision 1
(3) MI-M245, "Criteria for Technical Review", Revision 3
(4) NOP-503, "Procurement Program", Revision 4
(5) NQAP-0401, "Procurement Document Review", Revision 1
(6) NQAP-0701, "Supplier Evaluation", Revision 0
(7) NQAP-0702, "Source Inspections", Revision 0
(8) NQAP-0703, "Source Audits", Revision 0
(9) NQAP-0705, "Procurement Definitions - Related Words, Terms, and Documents", Revision 0
(10) POM 12.00.21, "Requisition Initiation, Review and Approval", Revision 5
(11) POM 12.00.27, "Material Receiving, Inspection and Status", Revision 8
(12) POM 12.00.53, "Guidelines for Determination of Safety Related Systems, Equipment and Procedures", Revision 1
(13) POM 12.00.55, "Administrative Procedure - In Process Material Control", Revision 0
(14) MI-M245, "Maintenance Instruction (MI) Criteria for Technical Review", Revision 2
(15) EF2-62 566, "Edison's Fermi 2 Approved Suppliers List for QA Level I/ASME Code Procurements", Revision C
(16) NE-5.17, "Procedure for Purchase of Consumable Items", Revision 0
(17) NQA-ASL, "Nuclear Quality Assurance Approved Suppliers List", EF-2-62 566 Revision C dated September 6, 1984
(18) 1SRF 01, "ARMS (Automated Records Management System)"
(19) 1SRF 02, "Comprehensive Records Retention Schedule", Revision 0
(20) 1SFR 03, "Master Documentation Distribution List", Revision 0
(21) NOIP 11.00.49, "Document Control and Records Management", Revision 3
(22) NOP 507, "Document Control and Records Management", Revision 0
(23) NQA 1701, "NQA Department Records", Revision 1
(24) OQAP 6, "Document Control", Revision 1
(25) QAPR 6, "Document Control", Revision 1
(26) NOIP 11.00.49, "Document Control and Records Management", Revision 3
(27) QAPR 5, "Instructions, Procedures, and Drawings", Revision 1
(28) QAPR 17, "Quality Assurance Records", Revision 1

(29) NOIP 11.00.49, "Document Control and Records Management", Revision 3
(30) SI 4.7.4.01, "Records Management", Revision 1
(31) SI 4.8.0.01, "Startup Training and Qualification", Revision 11
(32) QAPR 2, "Quality Assurance Program", Revision 1
(33) NQAP 501, "QA/QC Department Procedures", Revision 1
(34) NQAP 1801, "Audits", Revision 1
(35) QAPR 34, "Management Assessment"
(36) NE 1.4, "Nuclear Safety Review Group", Revision 3
(37) POM 12.000.28, "Material Handling and Storage", Revision 5

b. Procurement Control

The inspector reviewed the licensee's procurement control program and its implementation to verify conformance with regulatory requirements and quality program commitments. The inspection consisted of a review of applicable procedures, procurement documents and interviews with personnel.

The Nuclear Quality Assurance Approved Suppliers List (NQA-ASL) contained currently approved suppliers and "inactive" suppliers in the same listing. Licensee personnel stated that the inactive suppliers were those suppliers that had recently been dropped and were no longer approved. The licensee has agreed to delete the inactive suppliers from the next issue of the ASL in December, 1984. Completion of this action is considered an open item pending further review during a subsequent inspection (341/84-48-01).

During the review of source inspection activities, it was noted that inspection personnel from the licensee's Purchasing Inspection Division were performing source inspection to procedures which had not been reviewed and approved for use by the Fermi Nuclear QA Department. The Purchasing Inspection Division is an offsite Detroit Edison organization. Detroit Edison's Quality Assurance Program Requirement 5 states that the Director of Nuclear QA is responsible for reviewing procedures which affect safety-related activities to ensure that they include the appropriate quality requirements. This failure to ensure that the source inspection procedures were reviewed and approved in accordance with Quality Assurance Program Requirement 5, is considered be an item of non-compliance with 10 CFR 50, Appendix B, Criterion VI (341/84-48-02).

c. Document Control

The inspector reviewed the licensee's document control program to determine if administrative controls had been established to provide timely distribution of current as-built documents. The following other areas were considered during this review: required proposed changes and revisions receive the same level of management review required of the original document, outstanding revisions are appropriately identified, disposition of obsolete documents is identified, and any discrepancies found between as-built drawings and constructed facilities are handled as design changes.

Approximately fifteen controlled drawings were selected from Central Plan Files and reviewed at the following access points: Control Room, Maintenance Department, and Automated Records Management System (ARMS) terminal. The drawings were chosen at random and were reviewed to verify revision number and the number of unincorporated changes. All of the drawings had the correct revision number. One drawing contained an unincorporated change error that was immediately corrected. Several of the drawings selected had more than five unincorporated changes and in one case there were 19 outstanding changes. However, further review indicated that the total number of QA Level 1 drawings with more than five unincorporated changes presently number approximately 55 out of an approximate total of 48,000 vendor and DECo drawings. The inspector did not consider that number to be excessive.

No items of noncompliance or deviations were identified.

d. Preoperational Test Records

A review of the preoperational test records program was conducted to ascertain whether the licensee had developed a QA program for the control of preoperational test records that was in conformance with regulatory requirements and Quality Program commitments.

The inspector observed that the Preoperational Test Record Facility allowed free access to the records in order to permit access to blueprints located in the same area. The licensee agreed to implement tighter access control to the preoperational test records by locking all files. Access is now limited to assigned clerical personnel. The inspector considers these measures adequate to ensure proper access control.

No items of noncompliance or deviations were identified.

e. Records

A review of the records program was conducted to ascertain whether the licensee had developed a QA program for the control of records that was in conformance with regulatory requirements and quality program commitments. The following items were considered during this review: written procedures established for maintaining records, record filing and identification, record quality, identification of retention time, and storage facilities in accordance with ANSI N45.2.9-1974.

The inspector found that the Critical File Vault located in the Nuclear Operations Center (NOC) was in compliance with ANSI 45.2.9-1974 as a single facility vault. It was noted that the vault located in building 44A does not presently meet ANSI 45.2.9-1974 requirements as a single facility. The licensee has stated that this vault was to be used as a record staging area only and will not be upgraded to meet the requirements of a single facility.

No items of noncompliance or deviations were identified.

f. QA/QC Administration

The administration of the QA/QC program was reviewed to verify compliance with regulatory requirements and operational QA program commitments. The inspection was performed by reviewing portions of the quality program, applicable procedures and records, and by conducting personnel interviews.

The QA program appropriately defined and identified those structures, systems, components, documents and activities to which the QA program applied. Procedures and responsibilities had been established for revising program documents. Administrative controls were in place for QA/QC department procedures (i.e., procedures for QA/QC review, inspection activities and audit activities) to ensure the following:

(1) procedure review and approval prior to implementation
(2) methods and procedures for document changes and revisions
(3) methods and controls for document distribution and recall

No items of noncompliance or deviations were identified.

g. Receipt Inspection and Storage

The inspector reviewed the receipt inspection and storage program to ascertain compliance with regulatory requirements and program commitments. The program provided controls for inspecting items at receipt, including the characteristics to be verified for determining acceptance of the item. Receipt inspections were performed by qualified individuals and the results of the inspection were adequately documented. Items noted as deficient were properly tagged as nonconforming to prevent their inadvertent installation or use. Nonconforming items were also physically separated (if possible) from acceptable items. Receipt inspectors had the necessary supporting documentation (i.e., purchase orders, specifications, drawings, etc.) to perform their inspection. The storage of items was reviewed and determined to be in compliance with program requirements. The licensee had established a requirement for periodically inspecting stored items to ensure that controlled conditions were maintained. An inspection of the level B storage area did not result in the identification of any problems.

No items of noncompliance or deviations were identified.

h. Audit Program

The scope of the audit program had been defined and was consistent with FSAR commitments and Technical Specification requirements. The inspector verified that responsibilities had been assigned for the overall management of the audit program. The review included the verification of the following attributes:

(1) the adequacy of audit personnel qualifications
(2) audit personnel independence
(3) appropriateness of reaudits

(4) issuance of audit reports to management
(5) periodic review of the audit program to determine its status and adequacy

The inspector verified that methods and administrative channels had been defined for taking corrective actions when deficiencies were identified during audits. The audited organization was required to respond in writing to audit findings and distribution requirements for audit reports and corrective action responses had been defined.

The following two items of concern were noted during the review of the supplier audit program:

(a) Vendor audit findings were not being identified on the open item list (computer listing) as required by procedure NQAP 207. At the time of this inspection, the vendor audit findings were being tracked manually by the licensee's procurement QA personnel. Licensee personnel stated that vendor audit findings would be statused on the open item list as procedurally required.

(b) Vendor audits were not being scheduled in accordance with the requirements of QAPR 18 ("Audits"). Vendor audits were being scheduled by procurement QA personnel in an informal manner. Licensee personnel stated that a vendor audit schedule would be prepared in accordance with program requirements.

These issues are considered open pending the completion of the licensee's remedial action (341/84-48-03).

No items of noncompliance or deviations were identified.

4. 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 disclosed during the inspection are discussed in Paragraphs 3.b and 3.h.

5. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) on November 9, 1984 and summarized the purpose, scope and findings of the inspection.