

UNITED STATES NUCLEAR REGULATORY COMMISSION REGION III 2056 WESTINGS AVENUE, SUITE 400 NAPERVILLE, IL 60563-2657

November 1, 2024

Peter Dietrich Senior VP and Chief Nuclear Officer DTE Electric Company Fermi 2 – 260 TAC 6400 North Dixie Highway Newport, MI 48166

SUBJECT: ENRICO FERMI ATOMIC POWER PLANT, UNIT 1 - NRC INSPECTION REPORT NO. 050-00016/2024-001

Dear Pete Dietrich:

On October 8, 2024, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Enrico Fermi Atomic Power Plant, Unit 1 (Fermi 1). On October 8, 2024, the NRC inspectors discussed the results of this inspection with Derek Etue, Manager, Operations, and other members of your staff. The results of this inspection are documented in the enclosed report.

During the inspection period, the NRC inspector reviewed the following aspects of onsite activities: safety reviews, design changes and modifications; problem identification and resolution; fire protection; decommissioning performance; occupational radiation exposure; radiological surveys; radioactive waste treatment, effluent, and environmental monitoring; and waste management and transportation. The inspection consisted of an examination of activities at the site as they relate to safety and compliance with the Commission's rules and regulations.

No violations of more than minor safety significance were identified during this inspection.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at http://www.nrc.gov/reading-rm/adams.html and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* (CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

Band E. Hills, David on 11/01/24

David E. Hills, Chief Decommissioning, Reactor, ISFSI HP Branch Division of Radiological Safety and Security

Docket No. 50-016 License No. DPR-9

Enclosure: IR No. 05000016/2024001

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P. Dietrich

Letter to P. Dietrich from D. Hills dated November 1, 2024.

SUBJECT: ENRICO FERMI ATOMIC POWER PLANT, UNIT 1 - NRC INSPECTION REPORT NO. 050-00016/2024-001

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ADAMS ACCESSION NUMBER: ML24306A138

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U.S. NUCLEAR REGULATORY COMMISSION REGION III

Docket No:	50-016		
License No:	DPR-9		
Report No:	05000016/2024001		
Licensee:	DTE Electric Company		
Facility:	Enrico Fermi Atomic Power Plant, Unit 1		
Location:	Newport, MI		
Dates:	November 7, 2023, to October 8, 2024		
Inspector:	Peter J Lee, Reactor Inspector (Decom), Ph.D., CHP		
Approved by:	David E. Hills, Chief Decommissioning, Reactor, ISFSI HP Branch Division of Radiological Safety and Security		

EXECUTIVE SUMMARY

Enrico Fermi Atomic Power plant, Unit 1 NRC Inspection Report Nos. 05000016/2024001

This U.S. Nuclear Regulatory Commission (NRC) inspection was a routine, announced inspection of decommissioning activities being conducted at the facility. A brief summary of the areas reviewed are described below. Based on the results of the inspection no violations of more than minor safety significance were identified.

Safety Reviews, Design Changes, and Modifications

• The inspector determined that licensee had not performed any design changes that warranted a safety evaluation per Title 10 of the *Code of Federal Regulations* (CFR) 50.59.

Problem Identification and Resolution

 Issues were identified by the licensee at appropriate thresholds and entered into the Corrective Action Program (CAP). Issues were screened and prioritized commensurate with safety significance. Licensee evaluations determined the significance of issues and included appropriate remedial corrective actions.

Fire Protection Program at Permanently Shutdown Reactors

• The program is inspected by the NRC through the Reactor Oversight Process (ROP) for Unit 2.

Decommissioning Performance and Status Review

• The inspectors determined that decommissioning activities were in accordance with the regulations and license requirements.

Occupational Radiation Exposure

• The inspector determined that the licensee had not conducted any radiological work that resulted in worker exposures this past year.

Radioactive Waste Treatment, and Effluent and Environmental Monitoring

• The liquid and gaseous effluent sampling program was effective at quantifying radioactive effluent releases and the radiological environmental monitoring program (REMP) and groundwater protection initiative (GPI) were implemented in accordance with applicable procedures.

Solid Radioactive Waste Management and Transportation of Radioactive Materials

The licensee effectively processed, handled, stored, and transported radioactive material.

Report Details

Summary of Facility Status

Enrico Fermi Atomic Power Plant, Unit 1 (FERMI 1) is a permanently shut-down and defueled power reactor maintained in a Safe Storage (SAFSTOR) condition. During this inspection period, the licensee continued to maintain Fermi 1 in a passive monitoring SAFSTOR status; therefore, no physical decommissioning activities have been conducted. Since the last NRC inspection of Fermi 1, the licensee continued to conduct the technical specification monitoring surveillances, removal of standing water from the facility, and the groundwater monitoring. This facility is co-located with an operation reactor; thus, inspection activities were focused on program elements not assessed under the reactor oversight process for the operating unit.

1.0 Safety Reviews, Design Changes, and Modifications at Permanently Shutdown Reactors (IP 37801)

1.1 Inspection Scope

The purpose of this portion of the inspection was to verify that the licensee's safety review process was in accordance with the requirements of 10 CFR 50.59, "Changes, tests, and experiments" such that license amendments were obtained when required.

1.2 Observations and Findings

During the inspection, the inspector confirmed there were no changes to the decommissioning facility that required a safety evaluation according to the provisions of 10 CFR 50.59. This was consistent with the annual report filed by the licensee in June 2024 (ADAMS Accession Number ML24243A019).

No findings of significance were identified.

1.3 <u>Conclusions</u>

The licensee had not performed any design changes that warranted a safety evaluation per 10 CFR 50.59.

2.0 Problem Identification and Resolution at Permanently Shutdown Reactors (IP 40801)

2.1 Inspection Scope

The purpose of this portion of the inspection was to evaluate:

- 1) the effectiveness of licensee controls to identify, resolve, and correct issues,
- 2) the audit and assessment program and
- 3) management reviews of the safety conscious work environment.

2.2 Observations and Findings

The inspector reviewed all issues the licensee entered into the CAP since the last inspection. The inspector reviewed the licensee's audit of its semi-annual technical specification monitoring surveillances of Audit 23-0112 conducted from October 30, 2023, through November 01, 2023, and Audit 24-0104 conducted from May 06, 2024, through May 09, 2024. Selected corrective action work orders associated with identified deficiencies were also reviewed. The technical specification monitoring surveillances included weekly and monthly facility inspections, and quarterly radiation surveys. The audits of technical specification monitoring surveillances were appropriately focused in both scope and level of detail, and the licensee initiated appropriate corrective actions to resolve the audit findings.

No findings of significance were identified.

2.3 <u>Conclusions</u>

Issues were identified by the licensee at appropriate thresholds and entered into the CAP. Issues were screened and prioritized commensurate with safety significance. Licensee evaluations determined the significance of issues and included appropriate remedial corrective actions.

3.0 Fire Protection Program at Permanently Shutdown Reactors (IP 64704)

3.1 Inspection Scope

The purpose of this portion of the inspection was to evaluate the effectiveness of the fire protection program to ensure adequate protection from fire-induced release of radioactive material.

3.2 Observations and Findings

The fire protection program was inspected by the NRC's Reactor Oversight Process (ROP). The licensee's fire protection program is documented in the Fermi Integrated Inspection Report (ADAMS Accession Number ML23244A212).

No findings of significance were identified.

3.3 Conclusions

This program is inspected by the NRC through the ROP for Unit 2.

4.0 Decommissioning Performance and Status Review (IP 71801)

4.1 Inspection Scope

The purpose of this portion of the inspection was to evaluate the status of decommissioning and to verify the decommissioning activities are in accordance with regulatory and license requirements.

4.2 Observations and Findings

The inspector performed walkdowns, reviewed documents, and interviewed plant personnel to assess the licensee's performance in the following areas:

- Weekly and monthly facility inspection, and quarterly radiation surveillance;
- The postings and boundaries for contamination control;
- Control of the final status survey areas; and
- The status of standing water and leaking roof in FARB

The general condition of the facility was found to be well maintained and consistent with good housekeeping practices. The postings and boundaries for contamination control were well maintained. Final status survey (FSS) areas were adequately isolated and posted. There were no unexpected radiation readings detected. The radiation readings were consistent with the measurements taken to support the licensee's return of Fermi 1 in early 2012 from active decommissioning to a passive monitoring SAFSTOR status (ADAMS Accession Number ML12090A151).

On June 15, 2023, the licensee discovered a partial collapse at the FARB high roof, NE corner. The licensee performed a structural assessment and planned for the roof repairment in this coming fall. The FARB was roped off with safety barriers at all entrances identifying the roof hazard.

The only standing water left was in the sumps of the maintenance pit from the FARB. As described in Section 6.2, the licensee had pumped the water to the sanitary sewer system due to no detectable licensed materials identified.

No findings of significance were identified.

4.3 <u>Conclusions</u>

The inspectors determined that decommissioning activities were in accordance with the regulations and license requirements.

5.0 Occupational Radiation Exposure at Permanently Shutdown Reactors (IP 83750)

5.1 <u>Inspection Scope</u>

The purpose of this portion of the inspection was to evaluate the effectiveness of the licensee's occupational radiation safety program to adequately protect worker health and safety from exposure to radiation or radioactive material.

5.2 Observations and Findings

Based on the discussion with the licensee, there was no radiological work associated with worker exposures this past year. This was consistent with the annual report filed by the licensee in June 2024 (ADAMS Accession Number ML24243A019).

No findings of significance were identified.

5.3 <u>Conclusions</u>

The inspector determined that the licensee had not conducted any radiological work that resulted in worker exposures this past year.

6.0 Radioactive Waste Treatment, and Effluent and Environmental Monitoring IP 84750)

6.1 <u>Inspection Scope</u>

The purpose of this portion of the inspection was to evaluate the effectiveness of the licensee's liquid and gaseous effluent sampling program to quantify radioactive effluent releases and to verify that the radiological environmental monitoring program and groundwater protection initiative were effectively implemented.

6.2 Observations and Findings

The inspector performed walkdowns, reviewed documents, and interviewed plant personnel to assess the licensee's performance in the following areas:

- Analyses of ground water from Fermi1 active sumps;
- Analyses of ground water from Fermi1 monitoring wells;
- Analyses of standing water from the FARB; and
- Analyses of water recirculated through filter from the hot sump.

As noted in Sections 4.2, the licensee had removed the standing water from the maintenance pit sumps in the FARB, pumping it into the sanitary sewer system. The inspector reviewed analytical sampling results associated with those releases, as well as those from pertinent sumps to ensure no licensed materials were released. Fermi 1 sumps were sampled semi-annually in accordance with Surveillance Performance Form, Event FI 98. The inspector also reviewed the groundwater analytical sampling results from monitoring wells. Based on the review of the analytical sampling results, the inspector determined that only natural occurring radioactive materials were identified. The groundwater sampling result was consistent with the annual report filed by the licensee in June 2024 (ADAMS Accession Number ML24243A019). The licensee had recirculated the water from the hot sump through filters until no licensed materials identified then discharged water from the hot sump to the sumps of the maintenance pit from the FARB. The inspector reviewed the sampling results and determined that no licensed materials were identified in the water of hot sump.

No findings of significance were identified.

6.3 <u>Conclusions</u>

The liquid and gaseous effluent sampling program was effective at quantifying radioactive effluent releases and the REMP and GPI were implemented in accordance with applicable procedures.

7.0 Solid Radioactive Waste Management and Transportation of Radioactive Materials (IP 86750)

7.1 Inspection Scope

The purpose of this portion of the inspection was to evaluate the effectiveness of the licensee's programs for processing, handling, storage, and transportation of radioactive material.

7.2 Observations and Findings

During the inspection, the inspector found that radioactive material was controlled in accordance with requirements. The inspector interviewed plant personnel and determined that no shipments of radioactive material occurred since the last inspection. This was consistent with the annual report filed by the licensee in June 2024 (ADAMS Accession Number ML24243A019).

No findings of significance were identified.

7.3 <u>Conclusions</u>

The licensee effectively processed, handled, stored, and transported radioactive material.

8.0 Exit Meeting

The inspector presented the inspection results to Derek Etue and the other members of the Fermi1 staff at the conclusion of the inspection on October 8, 2024. The licensee acknowledged the results presented and did not identify any of the information discussed as proprietary.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION PARTIAL LIST OF PERSONS CONTACTED

- * Derek Etue Manager, Operations
- * Patrick McMahon Supervisor, Nuclear Fire Marshal and Operations Support
- * Eric Frank Manager, Nuclear Licensing
- * Greg Anderson Licensing

* Present at the October 8, 2024, exit meeting.

INSPECTION PROCEDURES (IPs) USED

- IP 37801 Safety Reviews, Design Changes, and Modifications at Permanently Shutdown Reactors
- IP 40801 Self-Assessment, Auditing, and Corrective Action at Permanently Shutdown Reactors
- IP 64704 Fire Protection Program at Permanently Shutdown Reactors
- IP 71801 Decommissioning Performance and Status Reviews at Permanently Shutdown Plants
- IP 83750 Occupational Radiation Exposure
- IP 84750 Radioactive Waste Treatment, and Effluent and Environmental Monitoring
- IP 86750 Solid Radioactive Waste Management and Transportation of Radioactive Materials

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened Type Summary

None

Closed <u>Type</u> <u>Summary</u>

None

DOCUMENTS REVIEWED

Licensee documents reviewed and utilized during the course of this inspection are specifically identified in the "Report Details"

LIST OF ACRONYMS USED

ADAMS	Agencywide Document Access and Management System
CAP	Corrective Action Program
CFR	Code of Federal Regulations
DRSS	Division of Nuclear Radiological Safety and Security
FSS	Final Status Survey
FARB	Fuel and Repair Building
IP	Inspection Procedure
NRC	U.S. Nuclear Regulatory Commission
SAFSTOR	Safe Storage
TS	Technical Specification
FSS FARB IP NRC SAFSTOR TS	Final Status Survey Fuel and Repair Building Inspection Procedure U.S. Nuclear Regulatory Commission Safe Storage Technical Specification