



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, ILLINOIS 60532-4352

December 13, 2021

Mr. Pete Dietrich, Senior VP
And Chief Nuclear Officer
DTE Electric Company
Fermi 2 – 260 TAC
6400 North Dixie Highway
Newport, MI 48166

SUBJECT: NRC INSPECTION REPORT NO. 050-00016/2021-001 (DNMS) - ENRICO
FERMI ATOMIC POWER PLANT, UNIT 1

Dear Mr. Dietrich:

On November 16, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at the permanently shut down Enrico Fermi Atomic Power Plant, Unit 1 (Fermi 1). The purpose of the inspection was to determine whether decommissioning activities were conducted safely and in accordance with NRC requirements. The enclosed report presents the results of this inspection, which were discussed with members of your staff on November 16, 2021.

During the inspection period, the NRC inspector reviewed the following aspects of onsite activities: safety reviews, design changes and modifications; self-assessments, audits, and corrective actions; 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. Areas examined during the inspection are identified in the enclosed report. Within these areas, the inspection consisted of a selective examination of procedures and representative records, reviewing work activities and interviews with personnel.

Based on the results of this inspection, the NRC did not identify any violations.

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,

David E. Hills

Signed by Hills, David
on 12/13/21

David E. Hills, Chief
Materials Control, ISFSI, and
Decommissioning Branch
Division of Nuclear Materials Safety

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

Enclosure: IR No. 05000016/2021001(DNMS)

cc w/encl: Distribution via LISTSERV®

Letter to Pete Dietrich from David Hills, dated December 13, 2021.

SUBJECT: NRC INSPECTION REPORT NO. 05000016/20210001 (DNMS) – ENRICO FERMIL ATOMIC POWER PLANT, UNIT 1

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ADAMS Accession Number: ML21347A387

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-016

License No: DPR-9

Report No: 05000016/2021001(DNMS)

Enterprise Identifier: I-2021-001-0085

Licensee: DTE Electric Company

Facility: Enrico Fermi Atomic Power Plant, Unit 1

Location: Newport, MI

Dates: November 16, 2021

Inspector: Peter J Lee, Reactor Inspector (Decom), Ph.,D., CHP

Approved by: David E. Hills, Chief
Materials Control, ISFSI, and
Decommissioning Branch
Division of Nuclear Materials Safety

Enclosure

EXECUTIVE SUMMARY

Enrico Fermi Atomic Power plant, Unit 1 NRC Inspection Report Nos. 05000016/2021001(DNMS)

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. This periodic safety inspection reviewed licensed activities associated with safety reviews, design changes and modifications; self-assessments, audits, and corrective actions; decommissioning performance; occupational radiation exposure; radiological surveys; radioactive waste treatment, effluent, and environmental monitoring; and waste management and transportation.

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.

Decommissioning Performance and Status Review

- The inspector concluded that the licensee conducted the facility monitoring surveillances in accordance with the requirement of Technical Specification.

Occupational Radiation Exposure

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

Radioactive Waste Treatment, and Effluent and Environmental Monitoring

- The inspector determined that no detectable licensed radioactive material had been released to the environment through the discharges from the active sumps and standing water in the basement of the Fuel and Repair Building (FARB).

Solid Radioactive Waste Management and Transportation of Radioactive Materials

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

Report Details

Summary of Plant Activities

During the inspection period, the licensee continued to maintain Fermi 1 in a passive monitoring Safe Storage (SAFSTOR) status; therefore, no physical decommissioning activities have been conducted.

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

1.1 Inspection Scope

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

- Whether the licensee's safety review process and procedures identified potential changes to Technical Specification (TS) results from proposed changes, tests, experiments, or modifications;
- Changes to design basis documentation are updated consistent with design changes;
- Design changes or modifications were effectively evaluated to maintain safety;
- Maintenance and/or work activities appropriately considered whether the activity resulted in a change or modification and was assessed in accordance with 10 CFR 50.59.

1.2 Observations and Findings

The licensee had pumped out standing water from the FARB and was recirculating the hot sump water through a filtration system, attempting to remove the non-soluble discrete radiological particles. Hence, the water would only contain soluble radiological materials and the collected water samples would be representative during water sampling. The licensee planned to release the hot sump water to the sanitary sewer system if no licensed materials are detected. Section 5.0 of this report contains additional discussion regarding release of the FARB standing water. The inspector determined that the licensee had performed adequate safety screenings and these were maintenance activities and not required safety evaluations according to the provisions of 10 CFR 50.59. This was consistent with the annual report filed by the licensee in August 2021 (ADAMS Accession Number ML21242A506).

No findings were identified.

1.3 Conclusions

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

- Effectiveness at preventing, detecting, and correcting issues;
- Identifying and evaluating potential 10 CFR Part 21, "Reporting of Defects and Non-Compliance Issues;"
- Audits and assessments evaluating the CAP and Quality Assurance Program; and
- The licensee's safety culture

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 technical specification monitoring surveillances of Audit 21-0104 conducted from April 19-21, 2021. 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, such as FARB roof leakage and resulting standing water issues. Correction actions included temporary roof repairs and removal of standing water. The licensee was evaluating further actions.

No findings were identified.

2.3 Conclusions

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 **Decommissioning Performance and Status Review (IP 71801)**

3.1 Inspection Scope

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 the contamination control; and
- Control of the final status survey areas.

3.2 Observations and Findings

The general condition of the facility was found to be well maintained and consistent with good housekeeping practices. The postings and boundaries for the 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).

No findings were identified.

3.3 Conclusions

The inspector concluded that the licensee conducted the facility monitoring surveillances in accordance with the requirement of Technical Specifications.

4.0 **Occupational Radiation Exposure at Permanently Shutdown Reactors (IP 83750)**

4.1 Inspection Scope

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

- Radiological controls, postings, and material conditions inside the radiological control areas; and
- Contamination monitoring including release of radioactive materials from controlled areas.

4.2 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 August 2021 (ADAMS accession Number ML21242A506).

No findings were identified.

4.3 Conclusions

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

5.0 **Radioactive Waste Treatment, and Effluent and Environmental Monitoring IP 84750)**

5.1 Inspection Scope

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; and
- Analyses of standing water from the FARB.

5.2 Observations and Findings

As notes in Sections 1.2 and 1.2 above, the licensee had removed the standing water

from the FARB, pumping it into the sanitary sewer system. The inspector reviewed radiological sampling records 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. Based on the review of the analytical sampling records, the inspector determined that only natural occurring radioactive materials were identified.

No findings were identified.

5.3 Conclusions

The inspector determined that no detectable licensed radioactive material had been released to the environment through the discharges from the active sumps and standing water in the basement of the FARB.

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

6.1 Inspection Scope

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

- Radioactive waste storage areas are appropriately controlled, labelled, posted and secured against unauthorized removal; and
- Containers of radioactive material are inventoried, and their material condition is monitored.

6.2 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 August 2021 (ADAMS accession Number ML21242A506).

No findings were identified.

6.3 Conclusions

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

7.0 **Exit Meeting**

The inspector presented the inspection results to members of the licensee's staff at the conclusion of the inspection on November 16, 2021. 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

- * E. Olson, Site Vice President
 - * R. Craven, Production Plant Manager
 - * M. Caragher, Director, Nuclear engineer
 - * E. Kokosky, Director, Oversight
 - * E. Dover, Manager, Nuclear Project
 - * A. Mann, Outage, Manager
 - * D. Perry, Manager, Performance Improvement
 - * J. Simone, Manager, Nuclear Quality Assurance
 - * J. Walters, Radiation Protection Manager
 - * M. Offerle, Manager Licensing
 - * J. LaCasse, Fermi 1 Custodian
 - * B. Rumans, Program General Supervisor Radiation Protection
 - * S. Gatter, Licensing
 - * N. Jordan, Supervisor, Project
- * Present at the November 16, 2021, 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 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

<u>Opened</u>	<u>Type</u>	<u>Summary</u>
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None

<u>Closed</u>	<u>Type</u>	<u>Summary</u>
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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
DNMS	Division of Nuclear Materials Safety
FSS	Final Status Survey
FARB	Fuel and Repair Building
IP	Inspection Procedure
NRC	U.S. Nuclear Regulatory Commission
SAFSTOR	Safe Storage
TS	Technical Specification