



August 30, 2024
NRC-24-0053

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

Enrico Fermi Atomic Power Plant, Unit 1
NRC Docket No. 50-16
NRC License No. DPR-9

Subject: Enrico Fermi Atomic Power Plant, Unit 1 – Annual Report for Period Ending June 30, 2024

Pursuant to Section F.7, Reporting Requirements, of the Technical Specifications for the Enrico Fermi Atomic Power Plant, Unit 1 (Fermi 1), the Annual Report for the period ending June 30, 2024 for the SAFSTOR Fermi 1 facility is enclosed.

No new commitments are being made in this submittal.

Should you have any questions or require additional information, please contact Patrick McMahon, Fermi 1 Custodian at 734-586-1572

Sincerely,

A handwritten signature in blue ink, appearing to read "Eric Frank".

Eric Frank
Manager - Nuclear Licensing

Enclosure: Enrico Fermi Atomic Power Plant, Unit 1 – Annual Report for Period July 1, 2023 through June 30, 2024

cc: NRC Project Manager
Regional Administrator, Region III

**Enclosure to
NRC-24-0053**

**Fermi 1 NRC Docket No. 50-16
License No. DPR-9**

**Enrico Fermi Atomic Power Plant, Unit 1 – Annual Report for Period July 1, 2023, through
June 30, 2024**

**ENRICO FERMI ATOMIC POWER PLANT, UNIT 1
ANNUAL REPORT
JULY 1, 2023 THROUGH JUNE 30, 2024**

1.0 PREFACE

This report provides a summary of the activities performed and the results of the facility surveillance program of the Enrico Fermi Atomic Power Plant, Unit 1, during the past twelve (12) months ending June 30, 2024.

In summary, required activities were conducted in accordance with the Possession-Only License and Technical Specifications. Fermi 1 is in Passive Monitoring SAFSTOR status.

2.0 SAFSTOR STATUS

2.1 Health Physics

2.1.1 Personnel Exposure

From July 1, 2023, through June 30, 2024, all monitored Fermi 1 personnel wore Dosimeters of Legal Record (DLRs). Additionally, Electronic Dosimeters (EDs) were worn throughout the reporting period as secondary dosimetry. All visitors were appropriately escorted and wore EDs, as a minimum, when entering all Fermi 1 Radiologically Controlled Areas (RCA).

The accumulated whole-body dose for personnel assigned to Fermi 1 was 0.004 REM for this reporting period. The total dose is based on data from the following:

0.000 REM (DLR-based) 01JUL23 – 31DEC23

0.005 REM (ED Based, Pre DLR Read) 01JAN24 - 30JUN24

Note: The 01JAN24 - 30JUN24 ED Based reading will be reconciled with a DLR reading in Fermi's next annual Radiation Exposure Information and Reporting System (REIRS) submittal.

2.2 Surveillance Program

2.2.1 Environmental Surveys

No liquid radiological releases occurred during this period; therefore, environmental monitoring samples were not required.

2.2.2 Weekly Tests and Inspections

General area --- The Fermi 1 staff performed walk throughs and visual inspections as required by Technical Specifications. During the period, there have been Controlled Area roof leaks and an approx. 5' by 8' hole in the Fuel and Repair Building (FARB) high roof that resulted in rain-water intrusion into the facility. This was identified in 2023. Funding was approved to perform further investigation of damage resulting in additional findings of deterioration. A strategy for repair was presented to Senior Management and additional funding has been obtained with a projected start time of September 2024. The roof area is monitored for any new leaks, which will be documented in weekly and monthly PMs and input into the repair plan as necessary.

2.2.3 Monthly Inspections

Controlled Area Inspections --- During the specified interval, Fermi 1 staff surveyed the sump water levels from the top access of all active sumps. Visual inspections of the fences, gates, and doors were conducted. No significant issues were identified during the inspections.

2.2.4 Quarterly Surveillances

Radiological Surveys --- The Radiation Protection technicians surveyed the Reactor Building and the FARB for presence of gamma radiation, as well as beta, gamma, and alpha contamination. There were no unexpected radiological conditions detected. The results of the quarterly contamination surveys indicated general area walkways remain < 1000 dpm/100 cm² beta/gamma and < 20 dpm/100 cm² alpha.

3.0 GROUNDWATER MONITORING

The Fermi 1 staff collected groundwater monitoring well samples during the period which were then analyzed by the site's contract laboratory. No plant-related radioactive isotopes were identified above the laboratory detection limit and no tritium isotopes were detected above the laboratory detection limit (less than 500 pCi/L).

4.0 RADIOLOGICAL SHIPMENTS

There were no radiological materials shipped offsite from Fermi 1 during the reporting period.

5.0 RADIOLOGICAL EFFLUENTS

There were no radiological gaseous effluent releases during the reporting period.

6.0 50.59 EVALUATIONS, DESIGN CHANGES AND LERs

6.1 10 CFR 50.59

There were no 10 CFR 50.59 evaluations performed during this period. Screenings determined that 50.59 evaluations were not required.

6.2 Design Changes

There were no Design Changes during this reporting period.

6.3 Licensee Event Reports

There were no Licensee Event Reports during this reporting period.

7.0 AUDIT SUBCOMMITTEE

The Audit Subcommittee inspected the physical facility and reviewed the Technical Specification surveillance records during the reporting period. No significant problems were identified.

All audit reports are maintained on file.