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DTE Energy



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NRC-13-0048

U. S. Nuclear Regulatory Commission
Attn.: Document Control Desk
Washington, D.C. 20555

Reference: 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, 2013

Pursuant to Section F.7, Reporting Requirements, of the Technical Specifications for Provisional Operating License No. DPR-9, the Annual Report for the period ending June 30, 2013 for the SAFSTOR Fermi 1 facility is enclosed.

Should you have any questions, please contact Daniel Breiding, Fermi 1 Custodian at 734-586-1912.

Sincerely,

A handwritten signature in black ink, appearing to be 'D. Breiding'.

ACTUALLY SUP FOR J.T. CONNER

Enclosure

cc: NRC Regional Administrator, Region III
T. Smith, NRC (Washington, D.C.)
NRC Resident Inspector - Fermi 2
P. Lee, NRC Region III
Michigan Department of Natural Resources & Environment
(yalek@michigan.gov)

**Enclosure to
NRC-13-0048**

**DTE ELECTRIC COMPANY
ENRICO FERMI ATOMIC POWER PLANT, UNIT 1**

**Docket No. 50-16
License No. DPR-9**

**Annual Report for Period
July 1, 2012 through June 30, 2013**

Approved by:


Daniel T. Breiding
Fermi 1 Custodian

Date:

8/21/13

ENRICO FERMI ATOMIC POWER PLANT, UNIT 1
ANNUAL REPORT
JULY 1, 2012 THROUGH JUNE 30, 2013

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, 2013.

In summary, required activities were conducted in accordance with the Operating License and Technical Specifications. Fermi 1 performed decommissioning activities with the shipment of contaminated components and debris. DTE Electric Company has returned Fermi 1 to a passive monitoring SAFSTOR status from the active final decontamination phase of SAFSTOR.

2.0 SAFSTOR STATUS

2.1 Health Physics

2.1.1 Personnel Exposure

From July 1, 2012 through June 30, 2013, all monitored Fermi 1 personnel wore Dosimeters of Legal Record (DLRs). Electronic Dosimeters (EDs) were worn from July 1, 2012 through June 30, 2013 as secondary dosimetry at Fermi 1. All visitors were appropriately escorted and wore EDs, as a minimum, when entering all Fermi 1 Radiologically Restricted Areas (RRA).

The accumulated whole body dose from activities associated with Fermi 1 was 0.187 (REM) for this reporting period. The total dose is based on data from the following:

- 0.187 REM (DLR) 01JUL12 – 31DEC12
- 0.000 REM (ED) 01JAN13 – 30JUN13

ED dose is presented for the second half of the monitoring period as DLR data were not available at the time of this report.

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. No significant issues were identified during the inspections.

2.2.3 Monthly Inspections

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

2.2.4 Quarterly Surveillances

Radiological Surveys --- The Radiation Protection technicians monitored the Reactor Building and the Fuel and Repair Building (FARB) for presence of gamma radiation, as well as beta, gamma, and alpha contamination. There were no unexpected radiation readings detected. The results of the quarterly contamination surveys indicated general area walkways remain <500-dpm/100 cm² beta/gamma and <20-dpm/100-cm² alpha.

3.0 DECOMMISSIONING PROJECT

Based on a review performed in 2011, DTE Energy Company had decided to return to a passive monitoring SAFSTOR status from the active final decontamination phase of SAFSTOR.

Repackaging of waste containers from previous decommissioning activities was performed during the reporting period to allow proper characterization of the waste prior to shipment.

The Fermi 1 staff collected groundwater monitoring well samples and no plant-related radioactive isotopes were detected above background levels.

3.1 Radiological Surveys

Radiological surveys were conducted in accordance with plant procedures. No unexpected radiological conditions were encountered during this reporting period.

3.2 Radiological Shipments

The Fermi 1 team shipped the following materials offsite from Fermi 1 during the reporting period. Tools and equipment shipped to Fermi 2 are not included in this table. Note: no applicable radioactive waste shipments were made during the first half of 2013.

Shipment Number	Material Description	Destination	Shipment Category	Activity (mCi)	Volume Gross (ft ³)	Weight Gross (lbs)
EF1-12-008	Mixed-waste Oil	DSSI Kingston, TN	Exempt	3.59E-05	7.5	211
EF1-12-009	DAW/Metals	EnergySolutions BWF Clive, UT	LSA	1.26E+02	5,459	147,300
EF1-12-011	DAW/Salt/Sand/ Sludge	EnergySolutions BWF Clive, UT	LSA	1,030	4,331	193,355
EF1-12-012	DAW/Metals	EnergySolutions BWF Clive, UT	LSA/LQ	10.7	2,703	35,935
EF1-12-013	DAW/Metals	EnergySolutions BWF Clive, UT	LSA	300	644.3	35,975
EF1-12-015	Mixed Waste (D008 Debris)	EnergySolutions Treatment Facility Clive, UT	Hazardous LQ	7.25	140	9,030
EF1-12-016	DAW/Metals	EnergySolutions BWF Clive, UT	LQ	1.94	638.2	24,915
EF1-12-017	3 rd Quarter Ground Water Samples	General Engineering Labs Charleston, SC	Exempt	1.23E-06 uCi/g	0.7	133
EF1-12-018	3 rd Quarter Ground Water Samples	General Engineering Labs Charleston, SC	Exempt	1.18E-06 uCi/g	0.2	20

BWF – Bulk Waste Facility
 DAW – Dry Active Waste
 LSA – Low Specific Activity
 LQ – Limited Quantity

4.0 RADIOLOGICAL EFFLUENTS

There were no unplanned radiological gaseous effluent releases during the reporting period. There were no measurable releases associated with the decommissioning project during the reporting period. The gaseous effluent releases were below the Technical Specification air dose limit of 10 mrad of gamma radiation and 20 mrad of beta radiation per year. The individual dose calculated due to gaseous effluent releases was below the Technical Specification dose limit of 5 mrem TEDE.

5.0 50.59 EVALUATIONS, DESIGN CHANGES AND LER's

5.1 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.

5.2 Design Changes

There were no Design Changes during this reporting period.

5.3 Licensee Event Reports

There were no Licensee Event Reports during this reporting period.

6.0 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.