

Fermi 2  
6400 North Dixie Hwy., Newport, Michigan 48166  
Tel: 734-586-5201 Fax: 734-586-4172

**DTE Energy**



10 CFR 50.90

December 6, 2004  
NRC-04-0052

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington D C 20555-0001

Reference: Fermi 2  
Docket No. 50-341  
License No. NPF-43

Subject: Application for Technical Specification Improvement to  
Eliminate Requirements to Provide Monthly Operating  
Reports and Occupational Radiation Exposure Reports

In accordance with the provisions of Section 50.90 of Title 10 of the Code of Federal Regulations (10 CFR), Detroit Edison is submitting a request for an amendment to the Technical Specifications (TS) for Fermi 2.

The proposed amendment would delete the TS requirements to submit monthly operating reports and annual occupational radiation exposure reports. The change is consistent with NRC-approved Revision 1 to industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-369, "Removal of Monthly Operating Report and Occupational Radiation Exposure Report". The availability of this TS improvement was announced in the Federal Register on June 23, 2004 (69 FR 35067) as part of the Consolidated Line Item Improvement Process (CLIIP).

Attachment 1 provides a description of the proposed change and confirmation of applicability. Attachment 2 provides the existing TS pages marked-up to show the proposed change. Attachment 3 provides the proposed TS revised pages.

A001

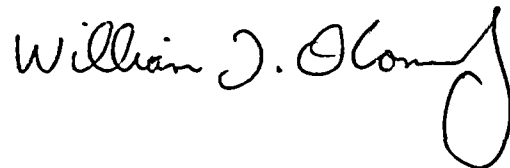
USNRC  
NRC-04-0052  
Page 2

Detroit Edison requests approval of the proposed license amendment by June 6, 2005, with the amendment being implemented within 30 days.

In accordance with 10 CFR 50.91, a copy of this application, with attachments, is being provided to the designated Michigan State Official.

If you have any questions or require additional information, please contact Mr. Norman K. Peterson, Manager, Nuclear Licensing at (734) 586-4258.

Sincerely,


A handwritten signature in black ink, appearing to read "William J. O'Connell". The signature is written in a cursive style with a large, looping final letter.

Attachments:

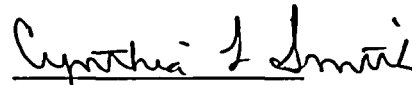
1. Description and Assessment
2. Proposed Technical Specification Changes (Mark-up)
3. Proposed Technical Specification Revised Pages

cc: D. P. Beaulieu  
E. R. Duncan  
NRC Resident Office  
Regional Administrator, Region III  
Supervisor, Electric Operators,  
Michigan Public Service Commission

I, WILLIAM T. O'CONNOR, JR., do hereby affirm that the foregoing statements are based on facts and circumstances which are true and accurate to the best of my knowledge and belief.

  
WILLIAM T. O'CONNOR, JR.  
Vice President – Nuclear Generation

On this 16<sup>th</sup> day of December, 2004 before me personally appeared William T. O'Connor, Jr., being first duly sworn and says that he executed the foregoing as his free act and deed.

  
Notary Public



CYNTHIA L. SMITH  
Notary Public, Monroe County, MI  
My Commission Expires Oct. 5, 2005

## **DESCRIPTION AND ASSESSMENT**

### **1.0 INTRODUCTION**

The proposed License amendment deletes the requirements in Technical Specifications (TS) 5.6.1 for an annual report on occupational radiation exposures and TS 5.6.4 for a monthly report of operating statistics and shutdown experience.

The changes are consistent with NRC-approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-369, "Removal of Monthly Operating Report and Occupational Radiation Exposure Report," Revision 1. The availability of this technical specification improvement was announced in the Federal Register on June 23, 2004 (69 FR 35067), as part of the Consolidated Line Item Improvement process (CLIIP).

### **2.0 DESCRIPTION OF PROPOSED AMENDMENT**

Consistent with the NRC-approved Revision 1 of TSTF-369, the proposed Fermi 2 TS changes include:

TS 5.6.1	Occupational Radiation Exposure Report	Deleted
TS 5.6.4	Monthly Operating Reports	Deleted

This application involves a site with both an operating reactor (Fermi 2) and a shutdown reactor (Fermi 1). Fermi 1 is a liquid metal (sodium) cooled fast breeder reactor and was permanently shutdown and de-fueled. Occupational radiation exposure received by workers at Fermi 1 has been a very small portion of the site dose. However, it has been included in past annual occupational exposure reports issued from Fermi 2. As addressed in the Notice of Availability for TSTF-369, Detroit Edison has included in this application a regulatory commitment to support the NRC need to apportion doses reported under 10 CFR 20 to the different categories of reactors at the site.

### **3.0 BACKGROUND**

The background for this application is adequately addressed by the NRC Notice of Availability published on June 23, 2004 (69 FR 35067) and TSTF-369.

### **4.0 REGULATORY REQUIREMENTS AND GUIDANCE**

The applicable regulatory requirements and guidance associated with this application are adequately addressed by the NRC Notice of Availability published on June 23, 2004 (69 FR 35067) and TSTF-369.

## **5.0 TECHNICAL ANALYSIS**

Detroit Edison has reviewed the safety evaluation (SE) published on June 23, 2004 (69 FR 35067) as part of the CLIIP Notice of Availability. This verification included a review of the NRC staff's SE and the supporting information provided to support TSTF-369. Detroit Edison has concluded that the justifications presented in the TSTF proposal and the SE prepared by the NRC staff are applicable to Fermi 2 and justify this amendment for the incorporation of the changes to the Fermi 2 TS.

## **6.0 REGULATORY ANALYSIS**

A description of this proposed change and its relationship to applicable regulatory requirements and guidance was provided in the NRC Notice of Availability published on June 23, 2004 (69 FR 35067) and TSTF-369.

### **6.1 Verification and Commitments**

As discussed in the model SE published in the Federal Register on June 23, 2004 (69 FR 35067) for the TS improvement, Detroit Edison is making the following regulatory commitments:

1. Detroit Edison is making a regulatory commitment to provide to the NRC, using an industry database, the operating data (for each calendar month) that is described in Generic Letter 97-02, "Revised Contents of the Monthly Operating Report," by the last day of the month following the end of each calendar quarter. The regulatory commitment will be based on use of an industry database (e.g., the industry's Consolidated Data Entry (CDE) program, currently being developed and maintained by the Institute of Nuclear Power Operations). This regulatory commitment will be implemented to prevent any gaps in the monthly operating statistics and shutdown experience provided to the NRC (i.e., data for all months will be provided using one or both systems (monthly operating reports and CDE)).
2. The Fermi site has both an operating reactor and a shutdown reactor.

Detroit Edison is making a regulatory commitment to provide information to the NRC annually (e.g., with the annual submittal in accordance with 10 CFR 20.2206) to support the apportionment of station doses to differentiate between operating and shutdown units. The data will provide the summary of distribution of annual whole body doses as presented in Appendix B of NUREG-0713 for each reactor type and for operating and shutdown units.

## **7.0 NO SIGNIFICANT HAZARDS CONSIDERATION**

Detroit Edison has reviewed the proposed no significant hazards consideration determination published on June 23, 2004 (69 FR 35067) as part of the CLIIP. Detroit Edison has concluded that the proposed determination presented in the notice is applicable to Fermi 2 and the determination is hereby incorporated by reference to satisfy the requirements of 10 CFR 50.91(a).

## **8.0 ENVIRONMENTAL EVALUATION**

Detroit Edison has reviewed the environmental evaluation included in the model SE published on June 23, 2004 (69 FR 35067) as part of the CLIIP. Detroit Edison has concluded that the staff's findings presented in that evaluation are applicable to Fermi 2 and the evaluation is hereby incorporated by reference for this application.

## **9.0 PRECEDENT**

This application is being made in accordance with the CLIIP. Detroit Edison is not proposing variations or deviations from its TS changes described in TSTF-369 or the NRC staff's model SE published on June 23, 2004 (69 FR 35067).

## **10.0 REFERENCES**

Federal Register Notice: Notice of Availability of Model Application Concerning Technical Specifications Improvement to Eliminate Requirements to Provide Monthly Operating Reports and Occupational Radiation Exposure Reports Using the Consolidated Line Item Improvement Process, published June 23, 2004 (69 FR 35067).

**ATTACHMENT 2 TO  
NRC-04-0052**

**PROPOSED TECHNICAL SPECIFICATION CHANGES (MARK-UP)**

**Pages 5.0-20 & 5.0-21**

## 5.0 ADMINISTRATIVE CONTROLS

## 5.6 Reporting Requirements

The following reports shall be submitted in accordance with 10 CFR 50.4.

## 5.6.1

Occupational Radiation Exposure Report

A tabulation on an annual basis of the number of plant, utility, and other personnel (including contractors) for whom monitoring was required to be performed receiving exposures > 100 mrem/yr and their associated man rem exposure according to work and job functions (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance describe maintenance, waste processing, and refueling). This tabulation supplements the requirements of 10 CFR 20.2206. The dose assignments to various duty functions may be estimated based on pocket dosimeter, thermoluminescent dosimeter (TLD), or film badge measurements. Small exposures totalling < 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources should be assigned to specific major work functions. The report shall be submitted by April 30 of each year.

DELETE

## 5.6.2

Annual Radiological Environmental Operating Report

The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in the Offsite Dose Calculation Manual (ODCM), and in 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

## 5.6.3

Radioactive Effluent Release Report

The Radioactive Effluent Release Report covering the operation of the unit during the previous year shall be submitted prior to May 1 of each year in accordance with 10 CFR 50.36a. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR 50, Appendix I, Section IV.B.1.

(continued)



## 5.6 Reporting Requirements (continued)

5.6.4 Monthly Operating Reports

Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis no later than the 15th of each month following the calendar month covered by the report.

DELETE

5.6.5 CORE OPERATING LIMITS REPORT (COLR)

- a. Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, and shall be documented in the COLR for the following:
  - LCO 3.2.1. "AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)";
  - LCO 3.2.2. "MINIMUM CRITICAL POWER RATIO (MCPR)";
  - LCO 3.2.3. "LINEAR HEAT GENERATION RATE (LHGR)"; and
  - LCO 3.3.2.1. "Control Rod Block Instrumentation."
- b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:
  1. NEDE-24011-P-A, "General Electric Standard Application for Reactor Fuel," (latest approved version); and
  2. NEDE-23785-1-PA, "The GESTR-LOCA and SAFER Models for the Evaluation of the Loss-of-Coolant-Accident - SAFER/GESTR, Application Methodology," (the approved version at the time the reload analyses are performed).
- c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling Systems (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.
- d. The COLR, including any midcycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

(continued)

**ATTACHMENT 3 TO  
NRC-04-0052**

**PROPOSED TECHNICAL SPECIFICATIONS REVISED PAGES**

**Pages 5.0-20 & 5.0-21**

## 5.0 ADMINISTRATIVE CONTROLS

### 5.6 Reporting Requirements

---

The following reports shall be submitted in accordance with 10 CFR 50.4.

#### 5.6.1 Deleted

#### 5.6.2 Annual Radiological Environmental Operating Report

The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in the Offsite Dose Calculation Manual (ODCM), and in 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

#### 5.6.3 Radioactive Effluent Release Report

The Radioactive Effluent Release Report covering the operation of the unit during the previous year shall be submitted prior to May 1 of each year in accordance with 10 CFR 50.36a. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR 50, Appendix I, Section IV.B.1.

---

(continued)

5.6 Reporting Requirements (continued)

---

5.6.4 Deleted

5.6.5 CORE OPERATING LIMITS REPORT (COLR)

- a. Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, and shall be documented in the COLR for the following:

LCO 3.2.1, "AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)";

LCO 3.2.2, "MINIMUM CRITICAL POWER RATIO (MCPR)";

LCO 3.2.3, "LINEAR HEAT GENERATION RATE (LHGR)"; and

LCO 3.3.2.1, "Control Rod Block Instrumentation."

- b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

1. NEDE-24011-P-A, "General Electric Standard Application for Reactor Fuel," (latest approved version); and

2. NEDE-23785-1-PA, "The GESTR-LOCA and SAFER Models for the Evaluation of the Loss-of-Coolant-Accident - SAFER/GESTR, Application Methodology," (the approved version at the time the reload analyses are performed).

- c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling Systems (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.

- d. The COLR, including any midcycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

---

(continued)