



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

August 29, 2012

Mr. Jack M. Davis  
Senior Vice President and  
Chief Nuclear Officer  
Detroit Edison Company  
Fermi 2 - 210 NOC  
6400 North Dixie Highway  
Newport, MI 48166

SUBJECT: FERMI 2 - ISSUANCE OF AMENDMENT FOR ADOPTION OF TSTF-306  
(TAC NO. ME7720)

Dear Mr. Davis:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 189 to Facility Operating License No. NPF-43 for the Fermi 2 facility. The amendment consists of changes to the technical specifications (TSs) in response to your application dated December 20, 2011 (Agencywide Documents Access and Management System (ADAMS) Access No. ML113550138).

The amendment revises TSs requirements related to primary containment isolation instrumentation. The changes are in accordance with NRC-approved Technical Specification Task Force (TSTF), Improved Standard Technical Specifications (ISTS) change TSTF-306, Revision 2.

A copy of our safety evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

A handwritten signature in black ink, appearing to read "Mahesh L. Chawla".

Mahesh L. Chawla, Project Manager  
Plant Licensing Branch III-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-341

Enclosures:

1. Amendment No. 189 to NPF-43
2. Safety Evaluation

cc w/encls: Distribution via ListServ



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

DETROIT EDISON COMPANY

DOCKET NO. 50-341

FERMI 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.189  
License No. NPF-43

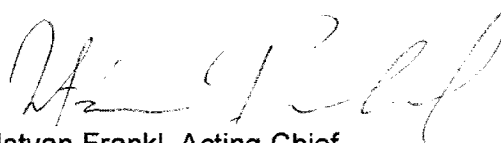
1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by the Detroit Edison Company (DECo, the licensee) dated December 20, 2011, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. NPF-43 is hereby amended to read as follows:

Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No.189, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. DECo shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Istvan Frankl, Acting Chief  
Plant Licensing Branch III-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: August 29, 2012

ATTACHMENT TO LICENSE AMENDMENT NO.189

FACILITY OPERATING LICENSE NO. NPF-43

DOCKET NO. 50-341

Replace the following pages of the Facility Operating License and Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE

INSERT

License Page 3

License Page 3

TSs

TSs

3.3-50  
3.3-53  
3.3-55  
3.3-56  
3.3-57  
3.3-58

3.3-50  
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3.3-55  
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3.3-58  
3.3-58a

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- (4) DECo, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material such as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
  - (5) DECo, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
  - (6) DECo, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
- (1) Maximum Power Level

DECo is authorized to operate the facility at reactor core power levels not in excess of 3430 megawatts thermal (100% power) in accordance with conditions specified herein and in Attachment 1 to this license. The items identified in Attachment 1 to this license shall be completed as specified. Attachment 1 is hereby incorporated into this license.
  - (2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No.189 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. DECo shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.
  - (3) Antitrust Conditions

DECo shall abide by the agreements and interpretations between it and the Department of Justice relating to Article I, Paragraph 3 of the Electric Power Pool Agreement between Detroit Edison Company and

Primary Containment Isolation Instrumentation  
3.3.6.1

3.3 INSTRUMENTATION

3.3.6.1 Primary Containment Isolation Instrumentation

LCO 3.3.6.1 The primary containment isolation instrumentation for each Function in Table 3.3.6.1-1 shall be OPERABLE.

APPLICABILITY: According to Table 3.3.6.1-1.

ACTIONS

-----NOTES-----

1. Penetration flow paths may be unisolated intermittently under administrative controls.
  2. Separate Condition entry is allowed for each channel.
- 

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more required channels inoperable.	A.1 Place channel in trip.	12 hours for Functions 1.f, 2.a, 2.c, 6.b, 7.a, and 7.b  <u>AND</u> 24 hours for Functions other than Functions 1.f, 2.a, 2.c, 6.b, 7.a, and 7.b
<p>-----NOTE----- With a Table 3.3.6.1-1 Function 5.c channel inoperable, isolation capability is considered maintained provided Function 5.b is OPERABLE in the affected room. -----</p> B. One or more automatic Functions with isolation capability not maintained.	B.1 Restore isolation capability.	1 hour

(continued)

Primary Containment Isolation Instrumentation  
3.3.6.1

SURVEILLANCE REQUIREMENTS

-----NOTES-----

1. Refer to Table 3.3.6.1-1 to determine which SRs apply for each Primary Containment Isolation Function.
  2. When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to:
    - a. 2 hours for Function 5.a when testing non-redundant circuitry that results in loss of isolation capability associated with this Function, provided Functions 5.b, 5.c, and 5.e are OPERABLE;
    - b. 6 hours for Function 5 (other than non-redundant circuitry of 5.a) provided the associated Function maintains isolation capability. 6 hours for Function 5.c provided Function 5.b is OPERABLE in the affected room;
    - c. 6 hours for Functions 1, 2, 6, and 7, provided the associated Function maintains isolation capability; and
    - d. 8 hours for Functions 3 and 4, provided the associated Function maintains isolation capability.
- 

SURVEILLANCE	FREQUENCY
SR 3.3.6.1.1 Perform CHANNEL CHECK.	12 hours
SR 3.3.6.1.2 Perform CHANNEL FUNCTIONAL TEST.	92 days
SR 3.3.6.1.3 Verify the trip unit setpoint.	92 days
SR 3.3.6.1.4 Perform CHANNEL CALIBRATION.	18 months
SR 3.3.6.1.5 Perform LOGIC SYSTEM FUNCTIONAL TEST.	18 months
SR 3.3.6.1.6 Perform CHANNEL FUNCTIONAL TEST.	18 months

(continued)

Primary Containment Isolation Instrumentation  
3.3.6.1

Table 3.3.6.1-1 (page 1 of 5)  
Primary Containment Isolation Instrumentation

FUNCTION	APPLICABLE NODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
<b>1. Main Steam Line Isolation</b>					
a. Reactor Vessel Water Level - Low Low Low, Level 1	1,2,3	2	D	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5 SR 3.3.6.1.7	≥ 24.8 inches
b. Main Steam Line Pressure - Low	1	2	E	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≥ 736 psig
c. Main Steam Line Flow - High	1,2,3	2 per MSL	D	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5 SR 3.3.6.1.7	≤ 118.4 psid
d. Condenser Pressure - High	1, 2(a), 3(a)	2	D	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 7.05 psia
e. Main Steam Tunnel Temperature - High	1,2,3	2 per trip string	D	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 206°F
f. Main Steam Line Radiation - High	1,2,3	2	D	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 3.6 x full power background
g. Turbine Building Area Temperature - High	1,2,3	4	D	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 206°F
h. Manual Initiation	1,2,3	1 per valve	G	SR 3.3.6.1.6	NA

(continued)

(a) Except when bypassed during reactor shutdown or for reactor startup under administrative control.



Primary Containment Isolation Instrumentation  
3.3.6.1

Table 3.3.6.1-1 (page 2 of 5)  
Primary Containment Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2. Primary Containment Isolation					
a. Reactor Vessel Water Level—Low, Level 3	1,2,3	2	H	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≥ 171.9 inches
b. Reactor Vessel Water Level—Low, Level 2	1,2,3	2	H	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≥ 103.8 inches
c. Drywell Pressure—High	1,2,3	2	H	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 1.88 psig
d. Manual Initiation	1,2,3	1 per valve	G	SR 3.3.6.1.6	NA
3. High Pressure Coolant Injection (HPCI) System Isolation					
a. HPCI Steam Line Flow—High	1,2,3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 410 inches of water with time delay ≥ 1 second, and ≤ 5 seconds
b. HPCI Steam Supply Line Pressure—Low	1,2,3	2	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≥ 90 psig
c. HPCI Turbine Exhaust Diaphragm Pressure—High	1,2,3	2	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 20 psig
d. HPCI Equipment Room Temperature—High	1,2,3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 162°F
e. Drywell Pressure—High	1,2,3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 1.88 psig
f. Manual Initiation	1,2,3	1 per valve	G	SR 3.3.6.1.6	NA

(continued)

Primary Containment Isolation Instrumentation  
3.3.6.1

Table 3.3.6.1-1 (page 3 of 5)  
Primary Containment Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
4. Reactor Core Isolation Cooling (RCIC) System Isolation					
a. RCIC Steam Line Flow—High	1,2,3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 95.0 inches of water with time delay ≥ 1 second and ≤ 5 seconds
b. RCIC Steam Supply Line Pressure—Low	1,2,3	2	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≥ 53 psig
c. RCIC Turbine Exhaust Diaphragm Pressure—High	1,2,3	2	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 20 psig
d. RCIC Equipment Room Temperature—High	1,2,3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 162°F
e. Drywell Pressure—High	1,2,3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 1.88 psig
f. Manual Initiation	1,2,3	1 per valve	G	SR 3.3.6.1.6	NA

(continued)

Primary Containment Isolation Instrumentation  
3.3.6.1

Table 3.3.6.1-1 (page 4 of 5)  
Primary Containment Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
5. Reactor Water Cleanup (RWCU) System Isolation					
a. Differential Flow - High	1,2,3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 63.4 gpm
b. Area Temperature - High	1,2,3	1 per area	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 183°F
c. Area Ventilation Differential Temperature - High	1,2,3	(d)	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 53°F
d. SLC System Initiation	1,2	2 <sup>(D)</sup>	I	SR 3.3.6.1.5	NA
e. Reactor Vessel Water Level - Low Low, Level 2	1,2,3	2	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≥ 103.8 inches
f. Manual Initiation	1,2,3	1 per valve	G	SR 3.3.6.1.6	NA
6. Shutdown Cooling System Isolation					
a. Reactor Steam Dome Pressure - High	1,2,3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 95.5 psig
b. Reactor Vessel Water Level - Low, Level 3	3,4,5	2(c)	J	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≥ 171.9 inches
c. Manual Initiation	1,2,3	1 per valve	G	SR 3.3.6.1.6	NA

(continued)

- (b) SLC System Initiation only inputs into one of the two trip systems.
- (c) Only one trip system required in MODES 4 and 5 when RHR Shutdown Cooling System integrity maintained.
- (d) For Function 5.c, Reactor Water Cleanup (RWCU) System Isolation, Area Ventilation Differential Temperature - High, the required channels is 1 per room.

Primary Containment Isolation Instrumentation  
3.3.6.1

Table 3.3.6.1-1 (page 5 of 5)  
Primary Containment Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
7. Traversing In-core Probe Isolation					
a. Reactor Vessel Water Level - Low, Level 3	1,2,3	2	G	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≥ 171.9 inches
b. Drywell Pressure - High	1,2,3	2	G	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.5	≤ 1.88 psig



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO.189 TO FACILITY OPERATING LICENSE NO. NPF-43

DETROIT EDISON COMPANY

FERMI 2

DOCKET NO. 50-341

1.0 INTRODUCTION

By letter dated December 20, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML113550138), Detroit Edison (the licensee) requested an amendment to Operating License NPF-43 for Fermi, Unit 2 (Fermi 2). The proposed amendment would modify technical specifications (TSs) requirements related to primary containment isolation instrumentation in accordance with the U.S. Nuclear Regulatory Commission (NRC)-approved Technical Specification Task Force (TSTF), Standard Technical Specifications Change Traveler, TSTF-306, Revision 2, "Add action to Limiting Condition for Operation (LCO) 3.3.6.1 to give option to isolate the penetration" (ADAMS Accession No. ML003725864). The proposed amendment would revise TS Section 3.3.6.1, "Primary Containment Isolation Instrumentation," by adding an ACTIONS note allowing intermittent opening, under administrative control, of penetration flow paths that are isolated. Additionally, the traversing in-core probe (TIP) system would be added as a separate isolation function with an associated Required Action (Condition G) to isolate the penetration within 24 hours rather than immediately initiating a unit shutdown (Condition H).

2.0 REGULATORY EVALUATION

The NRC staff considered the following regulatory requirements and guidance in its review of the application: (1) The criteria for inclusion of LCOs in the TSs in Section 50.36 of Part 50 of Title 10 of the *Code of Federal Regulations* (10 CFR) and (2) TSTF-306, Revision 2.

Section 50.36(c)(2)(i) of 10 CFR Part 50 states that the TS will contain LCOs that "are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the TS until the condition can be met." The primary containment isolation instrumentation automatically initiates closure of appropriate primary containment isolation valves (PCIVs). The function of the PCIVs, in combination with other accident mitigation systems, is to limit fission product release during and following postulated design-basis accidents (DBAs). Primary containment isolation within the

time limits specified for those isolation valves designed to close automatically ensures that the release of radioactive material to the environment will be consistent with the assumptions used in the analysis for a DBA. The TIP system isolation ball valves, which are only open when the TIP system is in use, receive isolation signals from the Primary Containment Isolation Function, as specified in Table 3.3.6.1-1, Function 2.a (Reactor Vessel Water Level - Low Level 1), and 2.b (Drywell Pressure - High) of the TS. As such, an inoperability of the Primary Containment Isolation Function affecting only the TIP instrumentation would require a unit shutdown. Isolation of the TIP system penetration flow paths in a design-basis event is assumed to be accomplished by manually actuating the shear (squib) valves.

### 3.0 TECHNICAL EVALUATION

TSTF-306, Revision 2, was submitted to the NRC on June 20, 2000, and was made available for plant-specific adoption via incorporation into Revision 2 of the Standard Technical Specifications (STSs), NUREGs 1430-1434 on June 30, 2001. The licensee's proposal is consistent with the intent of TSTF-306, Revision 2.

#### 3.1 Proposed TS Changes

The licensee proposes the following changes to Fermi 2, TS 3.3.6.1, "Primary Containment Isolation Instrumentation":

1. Adds a Note 1 to the Actions Notes that states "Penetration flow paths may be unisolated intermittently under administrative controls." An "S" is added to "NOTE" and the existing note becomes Note 2.
2. Revises the Completion Time of Condition A from "12 hours for Functions 1.f, 2.a, 2.c, and 6.b AND 24 hours for Functions other than Functions 1.f, 2.a, 2.c, and 6.b" to "12 hours for Functions 1.f, 2.a, 2.c, 6.b, 7.a, and 7.b AND 24 hours for Functions other than Functions 1.f, 2.a, 2.c, 6.b, 7.a and 7.b."
3. The TIP system isolation will be added as a separate isolation Function (7) in Table 3.3.6.1-1, with Function 7.a, "Reactor Vessel Water Level – Low, Level 3" and 7.b, "Drywell Pressure – High."
4. Adds Function 7 to Surveillance Requirements (SR) Note 2.c to allow delaying entry into associated Conditions and Required Actions for six hours when placing a channel in an inoperable status solely for performance of required surveillances.

#### 3.2 Evaluation of Change

TS 3.3.6.1 currently requires a unit shutdown in the event of an inoperability of the TIP instrumentation. The licensee is proposing to allow 24 hours to isolate the affected TIP penetration flow paths. In addition, the proposal would allow intermittent opening, under administrative control, of penetration flow paths that are isolated. The proposed amendment would also modify the TS Bases to describe the proposed changes and provide supporting information. In its submittal, the licensee indicated that TSTF-306, Revision 2, serves to provide consistency between the requirements for equipment (TS 3.6.1.3, "Primary Containment

Isolation Valves (PCIVs)”) and the instrumentation that supports the equipment and additional flexibility in the performance of maintenance and repair activities.

Prior to the approval of TSTF-306, Revision 2, STS 3.3.6.1, “Primary Containment Isolation Instrumentation,” would not allow intermittent opening, under administrative controls, of penetration flow paths isolated due to inoperable primary containment isolation instrumentation and would require a shutdown in the event of an inoperability of the TIP instrumentation. TSTF-306, Revision 2, revised STS 3.3.6.1 and its associated bases to be consistent with requirements of STS 3.6.1.3, “Primary Containment Isolation Valves,” with respect to administratively opening isolated penetration flow paths and to be consistent with the Actions in STS 3.3.6.1 for inoperable manual isolation functions. The Actions for the Fermi 2 TS 3.3.6.1 would be modified by the addition of a Note allowing intermittent opening, under administrative control, of penetrations that are isolated to comply with Actions, SRs, or operating conditions. These controls consist of stationing a dedicated operator at the controls of the valve, who is in continuous communication with the control room. The primary containment isolation instrumentation serves as a support system for the PCIVs. Current Fermi 2 TS 3.6.1.3 contains an Actions Note that allows penetrations isolated due to Actions, SR, and operating conditions to be intermittently opened under administrative control. The accident consequences are not affected by the allowance of isolated penetrations to be intermittently opened under administrative control due to an inoperable PCIV of its associated instrumentation. Since the Actions for inoperability of the instrumentation need not be more restrictive than the inoperability of the function it supports, the addition of Action Note 1 is acceptable.

The Fermi 2 TS 3.3.6.1 would be further modified by adding the TIP system isolation as a separate isolation instrumentation Function with an associated Required Action to isolate the penetration within 24 hours rather than having to immediately initiate a unit shutdown. TIP system isolation in a design-basis event (with a loss of offsite power) would be accomplished by manual actuation of the shear valves. Additionally, the Actions for inoperable primary containment isolation instrumentation that requires a unit shutdown are overly restrictive in the event that the inoperability affects only the TIP isolation instrumentation. The proposed Action for the inoperability of this Function is the same as for inoperable manual isolation Functions (i.e., isolate the penetration in 24 hours). This is because the TIP system penetration is a small bore (approximately ½-inch), and its isolation in a design-basis event is via the manually operated shear valves. The ability to manually isolate the TIP system by either the normal isolation valve or the shear valve isolation provides an appropriate level of safety. Therefore, the NRC staff finds the proposed changes acceptable and consistent with the STS and TSTF-306, Revision 2.

### 3.3 Summary

The NRC staff has reviewed the request by the licensee to revise the TS for Fermi 2. The proposed change is consistent with the STSs and TSTF-306, Revision 2, and provides reasonable assurance of overall plant safety. Based on the review, the NRC staff concludes that the proposed changes are acceptable.

#### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Michigan State official was notified of the proposed issuance of the amendment. The State official had no comments.

#### 5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or change the surveillance requirements. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding (77 FR 20073, dated April 3, 2012). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

#### 6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Brian E. Lee

Date of issuance : August 29, 2012



Mr. Jack M. Davis  
 Senior Vice President and  
 Chief Nuclear Officer  
 Detroit Edison Company  
 Fermi 2 - 210 NOC  
 6400 North Dixie Highway  
 Newport, MI 48166

August 29, 2012

SUBJECT: FERMI 2 - ISSUANCE OF AMENDMENT FOR ADOPTION OF TSTF-306  
 (TAC NO. ME7720)

Dear Mr. Davis:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 189 to Facility Operating License No. NPF-43 for the Fermi 2 facility. The amendment consists of changes to the technical specifications (TSs) in response to your application dated December 20, 2011 (Agencywide Documents Access and Management System (ADAMS) Access No. ML113550138).

The amendment revises TSs requirements related to primary containment isolation instrumentation. The changes are in accordance with NRC-approved Technical Specification Task Force (TSTF), Improved Standard Technical Specifications (ISTS) change TSTF-306, Revision 2.

A copy of our safety evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,  
 /RA/  
 Mahesh L. Chawla, Project Manager  
 Plant Licensing Branch III-1  
 Division of Operating Reactor Licensing  
 Office of Nuclear Reactor Regulation

Docket No. 50-341

Enclosures:

1. Amendment No.189 to NPF-43
2. Safety Evaluation

cc w/encls: Distribution via ListServ

DISTRIBUTION:

PUBLIC	LPL3-1 R/F	RidsNrrDoriLp3-1 Resource	RidsRgn3MailCenter Resource
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RidsNrrDirsltsb Resource		RidsNrrLABTully Resource	BLee, NRR
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Amendment Accession Number: ML12207A504

OFFICE	NRR/LPL3-1/PM	NRR/LPL3-1/LA	NRR/DSS/BC	OGC /NLO	NRR/STSB/BC
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DATE	08/07/12	07/26/12	08/08/12	08/13/12	08/09/12
OFFICE	NRR/LPL3-1/BC(A)	NRR/LPL3-1/PM			
NAME	IFrankl	MChawla			
DATE	08/29/12	08/29/12			