

December 18 , 2007

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: FERM1 2 - ISSUANCE OF AMENDMENT RE: TECHNICAL SPECIFICATION (TS) CHANGE (TSTF-477) TO ADD AN ACTION STATEMENT FOR TWO INOPERABLE CONTROL CENTER AIR CONDITIONING SUBSYSTEMS TO TS 3.7.4. (TAC NO. MD5769)

Dear Mr. Davis:

The Commission has issued the enclosed Amendment No. 177 to Facility Operating License No. NPF-43 for the Fermi 2 facility. The amendment consists of changes to the Technical Specifications (TS) in response to your application dated June 12, 2007, as supplemented by letter dated September 11, 2007.

The amendment revises TS 3.7.4 to add a Condition, Required Actions and Completion Times for two inoperable control center air conditioning (AC) subsystems. The amendment allows a finite time to restore one control center AC subsystem to operable status and require verification once every 4 hours that control room temperature is maintained < 90 degrees Fahrenheit. This TS improvement was made available by the U.S. Nuclear Regulatory Commission on March 26, 2007 (72 FR 14143) as part of the consolidated line item improvement process.

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/**

Adrian Muñiz, 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.177 to NPF-43
2. Safety Evaluation

cc w/encls: See next page

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DETROIT EDISON COMPANY

DOCKET NO. 50-341

FERMI 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.177  
License No. NPF-43

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by the Detroit Edison Company (the licensee) dated June 12, 2007, as supplemented by letter dated September 11, 2007, 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. 177, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. The licensee 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

**/RA/**

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

Attachment: Changes to the Facility Operating License  
and Technical Specifications

Date of Issuance: December 18, 2007

ATTACHMENT TO LICENSE AMENDMENT NO.

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

3.7-11

3.7-11

3.7-12

3.7-12

3.7-13

3.7-13

- (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 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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 177 FACILITY OPERATING LICENSE NO. NPF-43

DETROIT EDISON COMPANY

FERMI 2

DOCKET NO. 50-341

1.0 INTRODUCTION

By letter dated June 12, 2007 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML071700489), and supplemented by letter dated September 11, 2007 (ADAMS Accession No. ML072620127), Detroit Edison (the licensee) proposed changes to the Technical Specifications (TS) for Fermi 2. The supplement dated September 11, 2007, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on September 11, 2007 (72 FR 51854). The requested changes are the adoption of Technical Specification Task Force (TSTF)-477, Revision 3, "Add Action for Two Inoperable Control Room AC Subsystems" which was proposed by the TSTF by letter dated September 8, 2006. TSTF-477 revised Standard Technical Specification (STS) 3.7.5 "Control Room Air Conditioning (AC) System" by adding the following Condition, Required Actions and Completion Times:

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. Two [control room AC] subsystems inoperable	B.1 Verify control room area Temperature, < 90°F.	Once per 4 hours
	And	
	B.2 Restore one [control room ac] to OPERABLE status	72 hours

The TSTF change traveler TSTF-477, Revision 3, was announced for availability in the *Federal Register* on March 26, 2007 (72 FR 14143), as part of the consolidated line item improvement process.

2.0 REGULATORY EVALUATION

Section 182a of the Atomic Energy Act (the "Act") requires applicants for nuclear power plant operating licenses to include TS as part of the license. The TS ensure the operational capability of structures, systems and components that are required to protect the health and safety of the public. The Commission's regulatory requirements related to the content of the TS are contained in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36. That regulation requires that the TS include items in the following specific categories: (1) safety limits, limiting safety

systems settings, and limiting control settings (50.36(d)(1)); (2) limiting conditions for operation (50.36(d)(2)); (3) surveillance requirements (50.36(d)(3)); (4) design features (50.36(d)(4)); and (5) administrative controls (50.36(d)(5)).

In general, there are two classes of changes to TS: (1) Changes needed to reflect modifications to the design basis (TS are derived from the design basis), and (2) voluntary changes to take advantage of the evolution in policy and guidance as to the required content and preferred format of TS over time. This amendment addresses the second class of changes. In determining the acceptability of revising Control Room Air Conditioning AC Subsystem TS, the staff used the accumulation of generically approved guidance in NUREG-1433, "Standard Technical Specifications, Revision 3 General Electric Plants, BWR (boiling-water reactors)/4" dated June 2004 (BWR/4 STS).

Licensees may revise the TS to adopt current improved STS (iSTS) format and content provided that plant-specific review supports a finding of continued adequate safety because: (1) the change is editorial, administrative or provides clarification (i.e., no requirements are materially altered), (2) the change is more restrictive than the licensee's current requirement, or (3) the change is less restrictive than the licensee's current requirement, but nonetheless still affords adequate assurance of safety when judged against current regulatory standards. The detailed application of this general framework, and additional specialized guidance, are discussed in Section 3.0 in the context of specific proposed changes.

### 3.0 TECHNICAL EVALUATION

The required content of the BWR/4 STS for the Control Room AC System do not contain a Condition, Required Actions and Completion Times for two inoperable subsystems. During the TS Conversion of the BWR/6 Plants, the BWR/6 Plants adopted Action Statements for the Ventilation and AC systems that contained Action Statements for two inoperable subsystems similar to the proposed Action Statements in TSTF-477. The STS for numerous safety-related systems also contain Action Statements for two inoperable subsystems. The TSTF proposes to add a Condition, Required Actions, and Completion Times for two inoperable Control Room AC subsystems to the BWR STS in order to be consistent with the BWR/6 current STS. Furthermore, the consistency of the BWR STS will be enhanced since most safety-related systems presently have Action Statements in the STS to address two inoperable subsystems.

#### 3.1 Action Statement for two Inoperable Control Room Air Conditioning Subsystems (New Condition B)

The proposed BWR/4 Action Statement allows 72 hours to restore one subsystem to the operable status for the TS condition of two inoperable subsystems. During the 72 hour completion time the Control Room Temperature is verified < 90 degrees Fahrenheit every 4 hours. If one Control Room AC subsystem can not be restored to operable status, or the Control Room Temperature can not be maintained < 90 degrees Fahrenheit, then the unit must be placed in at least Mode 3 within 12 hours, and Mode 4 within 36 hours. Maintaining the control room temperature < 90 degrees Fahrenheit assures that the safety-related equipment in the control room will remain within the original licensed design operating temperature, because the maximum allowable control room temperature is unchanged by TSTF-477. The Nuclear Regulatory Commission (NRC) staff finds that the proposed changes in TSTF-477 are acceptable for Fermi 2 because TSTF-477 changes provide TS requirements that the control

room temperature will be maintained within the original licensed design operating temperature of

the control room equipment, or the plant will be placed in the Cold Shutdown Mode (Mode 4, Safe Shutdown Condition).

### 3.2 Current Condition B

Current Condition B, now renamed Condition C, which applies when the required Action and associated Completion Time of Condition A (one control room AC subsystem inoperable) is not met in Modes 1, 2, or 3, is revised to also be applicable when the Required Actions and associated Completion Times of new Condition B are not met. Renumbered Condition C requires being in Mode 3 in 12 hours and Mode 4 in 36 hours. This change is consistent with TSTF-477 and is therefore acceptable.

### 3.3 Current Condition C

Current Condition C and associated Required Actions C.1, C2.1 and C2.2 are renamed Condition D and Required Actions D.1 and D.2.1 and D.2.2, respectively. The NRC staff consider these changes to be administrative and, therefore, acceptable.

### 3.4 Current Condition D

Current Condition D, which applied when two control room AC subsystems are inoperable in Mode 1, 2, or 3, and requires entry into LCO 3.0.3, is deleted. This change is consistent with TSTF-477 and is therefore acceptable.

### 3.5 Current Condition E

Current Condition E, which applies when two control room AC subsystems are inoperable during movement of recently irradiated fuel assemblies in the secondary containment, or during operations with a potential for draining the reactor vessel, is revised to be applicable when the Required Actions and associated Completion Times of new Condition B are not met. This change is consistent with TSTF-477 and is therefore acceptable.

The NRC staff does not have any objections to the proposed changes to the TS Bases.

## 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. The NRC 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 (72 FR 51854).

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) 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: A. Jason Lising

Date: December 18 , 2007

Fermi 2

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