

December 4, 1989

Docket No. 50-341

Mr. B. Ralph Sylvia  
Senior Vice President - Nuclear  
Operations  
Detroit Edison Company  
6400 North Dixie Highway  
Newport, Michigan 48166

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Dear Mr. Sylvia:

SUBJECT: AMENDMENT NO. 47 TO FACILITY OPERATING LICENSE NO. NPF-43:  
(TAC NO. 71234)

The Commission has issued the enclosed Amendment No. 47 to Facility Operating License No. NPF-43 for the Fermi-2 facility. This amendment consists of changes to the Plant Technical Specifications (TSs) in response to your letter dated November 15, 1988.

The amendment revises the TSs to clarify the location of the noble gas monitor in the Fermi-2 offgas system. In addition, the term "HOT STANDBY" in the action statement of Section 3.11.2.7 of the TSs is replaced by "STARTUP, with all main steamlines isolated."

A copy of the Safety Evaluation supporting this amendment is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

*[Handwritten signature]*

John F. Stang, Project Manager  
Project Directorate III-1  
Division of Reactor Projects - III,  
IV, V & Special Projects  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No 47 to NPF-43
2. Safety Evaluation

cc w/enclosures:  
See next page

LA/PD31: DRSP *[initials]*  
PShuttleworth  
10/12/89

*JOT for JS*  
PM/PD31: DRSP  
JStang  
10/12/89

(A)D/PD31: DRSP  
*[initials]*  
JThomas  
10/ /89  
12/4/89

OGC *[initials]*  
10/23/89

*SPLB*  
*[initials]*  
a. McCracken  
12/1/89

R. Anand  
12/1/89

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

December 4, 1989

Docket No. 50-341

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Senior Vice President - Nuclear  
Operations  
Detroit Edison Company  
6400 North Dixie Highway  
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A copy of the Safety Evaluation supporting this amendment is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

A handwritten signature in cursive script that reads "John F. Stang".

John F. Stang, Project Manager  
Project Directorate III-1  
Division of Reactor Projects - III,  
IV, V & Special Projects  
Office of Nuclear Reactor Regulation

Enclosures:

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2. Safety Evaluation

cc w/enclosures:  
See next page

Mr. B. Ralph Sylvia  
Detroit Edison Company

Fermi-2 Facility

cc:

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

DETROIT-EDISON COMPANY

WOLVERINE POWER SUPPLY COOPERATIVE, INCORPORATED

DOCKET NO. 50-341

FERMI-2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 47  
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 November 15, 1988, 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. 47, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. DECo shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*John O. Thoma*

John O. Thoma, Acting Director  
Project Directorate III-1  
Division of Reactor Projects - III,  
IV, V & Special Projects  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: December 4, 1989

ATTACHMENT TO LICENSE AMENDMENT NO 47

FACILITY OPERATING LICENSE NO. NPF-43

DOCKET NO. 50-341

Replace the following page of the Appendix "A" Technical Specifications with the attached page. The revised page is identified by Amendment number and contains vertical lines indicating the areas of change. The corresponding overleaf page is also provided to maintain document completeness.

REMOVE

3/4 11-17

3/4 11-18\*

INSERT

3/4 11-17

3/4 11-18\*

\*Overleaf page provided to maintain document completeness. No changes contained in this page.

## RADIOACTIVE EFFLUENTS

### MAIN CONDENSER

#### LIMITING CONDITION FOR OPERATION

---

3.11.2.7 The gross radioactivity rate of noble gases measured at the discharge of the 2.2 minute delay piping shall be limited to less than or equal to 340 millicuries/sec after 30 minute decay.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2\*, and 3\*.

#### ACTION:

With the gross radioactivity rate of noble gases at the discharge of the 2.2 minute delay piping exceeding 340 millicuries/sec after 30 minute decay, restore the gross radioactivity rate to within its limit within 72 hours or be in at least STARTUP, with all main steam lines isolated, within the next 12 hours.

#### SURVEILLANCE REQUIREMENTS

---

4.11.2.7.1 The radioactivity rate of noble gases at the discharge of the 2.2 minute delay piping shall be continuously monitored in accordance with Specification 3.3.7.12.

4.11.2.7.2 The gross radioactivity rate of noble gases from the main condenser steam jet air ejector shall be determined to be within the limits of Specification 3.11.2.7 at the following frequencies by performing an isotopic analysis of a representative sample of gases taken at the discharge of the 2.2 minute delay piping:

- a. At least once per 31 days.
- b. Within 4 hours following an increase, as indicated by the Offgas Radiation Monitor, of greater than 50%, after factoring out increases due to changes in THERMAL POWER level, in the nominal steady-state fission gas release from the primary coolant.
- c. The provisions of Specification 4.0.4 are not applicable.

---

\*When the main condenser air ejector is in operation.

## RADIOACTIVE EFFLUENTS

### VENTING OR PURGING

#### LIMITING CONDITION FOR OPERATION

---

3.11.2.8 VENTING or PURGING of the Mark I containment shall be through the standby gas treatment system or the reactor building ventilation system.

APPLICABILITY: Whenever the containment is vented or purged.

ACTION:

- a. With the requirements of the above specification not satisfied, suspend all VENTING and PURGING of the drywell.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

---

4.11.2.8.1 The containment shall be determined to be aligned for VENTING or PURGING through the standby gas treatment system or the reactor building ventilation system within 4 hours prior to start of and at least once per 12 hours during VENTING or PURGING of the containment.

4.11.2.8.2 Prior to use of the purge system through the standby gas treatment system assure that:

- a. Both standby gas treatment system trains are OPERABLE whenever the purge system is in use, and
- b. Whenever the purge system is in use during OPERATIONAL CONDITION 1 or 2 or 3, only one of the standby gas treatment system trains may be used.

4.11.2.8.3 The containment drywell shall be sampled and analyzed per Table 4.11.2.1.2-1 of Specification 3.11.2.1 within 8 hours prior to the start of and at least once per 12 hours during VENTING and PURGING of the drywell through other than the standby gas treatment system.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 47 TO FACILITY OPERATING LICENSE NO. NPF-43

DETROIT EDISON COMPANY

WOLVERINE POWER SUPPLY COOPERATIVE, INCORPORATED

FERMI-2

DOCKET NO. 50-341

1.0 INTRODUCTION

By letter dated November 15, 1988, the Detroit Edison Company (DECo or the licensee) requested amendment to the Technical Specifications (TSs) appended to Facility Operating License No. NPF-43 for Fermi-2. The proposed amendment would change the Technical Specifications to clarify the location of the noble gas monitor in the Fermi-2 offgas system. In addition, the term "HOT STANDBY" in the action statement of Section 3.11.2.7 of the TSs would be replaced by "STARTUP, with all main steamlines isolated."

2.0 EVALUATION

Section 3/4.11.2.7 of the Fermi-2 TSs provides a limiting condition for operation (LCO) and surveillance requirements (SR) for the gross radioactivity rate of noble gases from the main condenser.

The original plant TSs did not correctly indicate the location of the noble gas monitor for the main condenser. The proposed amendment will provide a more accurate description of the monitor in question.

The change of terminology from "at the main condenser steam jet air ejector" to "at the discharge of the 2.2 minute delay piping" does not change the monitor being used for this function. The monitor at the discharge 2.2 minute delay piping is the monitor reviewed by the staff in the Fermi-2 Safety Evaluation Report (NUREG-0798) to measure noble gas activity from the main condenser released via the offgas system and is included in TS 3/4.3.7.12, Radioactive Gaseous Effluent Monitoring Instrumentation. This proposed change is administrative in nature and has no effect on safe plant operation.

The proposed amendment also would change the term "HOT STANDBY" to "STARTUP, with all main steam lines isolated" in the TS action statement. The term "HOT STANDBY" is not defined in the Fermi-2 TSs. The proposed wording retains the intent of reducing the power level of the reactor in order to reduce noble gas production in the reactor core following a fuel failure and stopping the noble gas release by isolating the main steamlines.

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The proposed changes provide clarification to the TSs. The changes provide clearer guidance for monitoring the gross radioactivity rate of noble gases from the main condenser and they require actions to be taken if the radioactivity rate is greater than the LCO in the TSs. The changes are administrative in nature and do not change the intent of the TSs or affect the safe operation of the plant. Based on the above evaluation, the staff finds the proposed changes acceptable.

### 3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves changes in requirements with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this 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 impacts statement or environmental assessment need be prepared in connection with the issuance of this amendment.

### 4.0 CONCLUSION

We have 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, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: John Stang

Date: December 4, 1989