Docket No. 50-341

Mr. B. Ralph Sylvia Senior Vice President - Nuclear Operations Detroit Edison Company 6400 North Dixie Highway Newport, Michigan 48166 DISTRIBUTION Docket File NRC & Local PDRs PD31 Plant Gray GHolahan MVirgilio PShuttleworth OGC DHagan JStang

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Dear Mr. Sylvia:

SUBJECT: AMENDMENT NO. 39 TO FACILITY OPERATING LICENSE NO. NPF-43: (TAC NO. 67098)

The Commission has issued the enclosed Amendment No. 39 to Facility Operating License No. NPF-43 for the Fermi-2 facility. This amendment consists of changes to the Plant Technical Specifications in response to your letter dated January 27, 1988 as supplemented May 10, 1989.

The amendment revises the Technical Specifications (TS) and Bases to clarify the TS for operation with the Moisture Separator Reheater (MSR) out-of-service.

A copy of the related Safety Evaluation and Notice of Issuance are enclosed.

Sincerely,

original signed by

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. 39 to NPF-43
- 2. Safety Evaluation
- 3. Notice

cc w/enclosures: See next page

LA/PD31:DRSP

08/4/89

**PShuttleworth** 

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UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555 September 1, 1989

Docket No. 50-341

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1. Amendment No. 39 to NPF-43

- 2. Safety Evaluation
- 3. Notice

cc w/enclosures: See next page Mr. B. Ralph Sylvia Detroit Edison Company

cc:

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Fermi-2 Facility

Ms. Lynn Goodman Supervisor - Licensing Detroit Edison Company Fermi Unit 2 6400 North Dixie Highway Newport, Michigan 48166



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. 39 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 January 27, 1988 as supplemented May 10, 1989, 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.
- 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 Futection Plan

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The Technical Specifications contained in Appendix A, as revised through Amendment No. 39, 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. 3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Koma

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: September 1, 1989

# ATTACHMENT TO LICENSE AMENDMENT NO. 39

## FACILITY OPERATING LICENSE NO. NPF-43

## DOCKET NO. 50-341

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain a vertical line indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

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3/4 7-40	3/4 7-40
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#### 3/4.2.3 MINIMUM CRITICAL POWER RATIO

#### LIMITING CONDITION FOR OPERATION

3.2.3 The MINIMUM CRITICAL POWER RATIO (MCPR) shall be equal to or greater than the MCPR limit shown in Figure 3.2.3-1 times the  $K_f$  shown in Figure 3.2.3-2, with:

$$\tau = \frac{(\tau_{ave} - \tau_B)}{\tau_A - \tau_B}$$

where:

 $\tau_A = 1.096$  seconds, control rod average scram insertion time limit to notch 36 per Specification 3.1.3.3,

$$\tau_{\rm B} = 0.852 + 1.65 \left[\frac{N_1}{\sum_{i=1}^{n} N_i}\right]^{\frac{1}{2}} 0.06$$

$$\tau_{ave} = \frac{i=1}{\sum_{i=1}^{N} i\tau_{i}},$$
$$\sum_{i=1}^{n} N_{i}$$

n = number of surveillance tests performed to date in cycle,

- N<sub>i</sub> = number of active control rods measured in the i<sup>th</sup> surveillance test,
- $\tau_i$  = average scram time to notch 36 of all rods measured in the i<sup>th</sup> surveillance test, and
- $N_1$  = total number of active rods measured in Specification 4.1.3.2.a.

#### APPLICABILITY:

OPERATIONAL CONDITION 1, when THERMAL POWER is greater than or equal to 25% of RATED THERMAL POWER.

#### ACTION

- a. With MCPR less than the applicable MCPR limit shown in Figures 3.2.3-1 and 3.2.3-2, initiate corrective action within 15 minutes and restore MCPR to within the required limit within 2 hours or reduce THERMAL POWER to less than 25% of RATED THERMAL POWER within the next 4 hours.
- b. With the main turbine bypass system and/or Moisture Separator Reheater inoperable per Specification 3.7.9, operation may continue and the provisions of Specification 3.0.4 are not applicable provided that, within one hour, MCPR is determined to be equal to or greater than the MCPR limit as shown in Figure 3.2.3-1 by the main turbine bypass and/or Moisture Separator Reheater inoperable curves times the applicable  $K_f$  shown in Figure 3.2.3-2.

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#### SURVEILLANCE REQUIREMENTS

4.2.3 MCPR, with:

- a.  $\tau = 1.0$  prior to performance of the initial scram time measurements for the cycle in accordance with Specification 4.1.3.2, or
- b.  $\tau$  as defined in Specification 3.2.3 used to determine the limit within 72 hours of the conclusion of each scram time surveillance test required by Specification 4.1.3.2,

shall be determined to be equal to or greater than the applicable MCPR limit determined from Figures 3.2.3-1 and 3.2.3-2:

- a. At least once per 24 hours,
- b. Within 12 hours after completion of a THERMAL POWER increase of at least 15% of RATED THERMAL POWER, and
- c. Initially and at least once per 12 hours when the reactor is operating with a LIMITING CONTROL ROD PATTERN for MCPR.
- d. The provisions of Specification 4.0.4 are not applicable.



CURVE A - MCPR LIMIT WITH MAIN TURBINE BYPASS <u>AND</u> WITH MOISTURE SEPARATOR REHEATER CURVE B - MCPR LIMIT WITHOUT MAIN TURBINE BYPASS <u>OR</u> WITHOUT MOISTURE SEPARATOR REHEATER CURVE C - MCPR LIMIT WITHOUT MAIN TURBINE BYPASS <u>AND</u> WITHOUT MOISTURE SEPARATOR REHEATER

MINIMUM CRITICAL POWER RATIO (MCPR) VERSUS  $\checkmark$  AT RATED FLOW

FIGURE 3.2.3-1

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## PLANT SYSTEMS

#### SURVEILLANCE REQUIREMENTS (Continued)

4.7.8.2 Each of the above required fire doors shall be verified OPERABLE by inspecting the automatic hold-open, release and closing mechanism and latches at least once per 6 months, and by verifying:

- a. The OPERABILITY of the fire door supervision system for each electrically supervised fire door by performing a CHANNEL FUNCTIONAL TEST at least once per 31 days.
- b. The position of each locked-closed fire door at least once per 7 days.
- c. That each unlocked fire door without electrical supervision is closed at least once per 24 hours.

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## PLANT SYSTEMS

#### 3/4.7.9 MAIN TURBINE BYPASS SYSTEM AND MOISTURE SEPARATOR REHEATER

#### LIMITING CONDITION FOR OPERATION

3.7.9 The main turbine bypass system and Moisture Separator Reheater shall be OPERABLE.

<u>APPLICABILITY</u>: OPERATIONAL CONDITION 1 when THERMAL POWER is greater than or equal to 25% of RATED THERMAL POWER.

<u>ACTION</u>: With the main turbine bypass system and/or Moisture Separator Reheater inoperable, restore the system to OPERABLE status within 1 hour or take the ACTION required by Specification 3.2.3.

#### SURVEILLANCE REQUIREMENTS

4.7.9 The main turbine bypass system shall be demonstrated OPERABLE at least once per:

- a. 92 days and during each COLD SHUTDOWN, by cycling each turbine bypass valve through at least one complete cycle of full travel, and
- b. 18 months by:
  - 1. Performing a system functional test which includes simulated automatic actuation and verifying that each automatic valve actuates to its correct position.
  - 2. Demonstrating TURBINE BYPASS SYSTEM RESPONSE TIME to be less than or equal to 300 milliseconds.

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## BASES TABLE B 3.2.1-1

#### SIGNIFICANT INPUT PARAMETERS TO THE

## LOSS-OF-COOLANT ACCIDENT ANALYSIS

Plant Parameters:

Core THERMAN	_ POWER	3430 MWt* which corresponds to 105% of rated steam flow
Vessel Stear	n Output	14.86 x 10 <sup>6</sup> lbm/hr which corresponds to 105% of rated steam flow
Vessel Stear	n Dome Pressure	1055 psia
Design Basi Break Area	s Recirculation Line a for:	
a. L	arge Breaks  4.1 ft <sup>2</sup>	
b. Si	mall Breaks 0.1 ft	

Fuel Parameters:

Initial Core	8 x 8	13.4	1.4	1.18	
FUEL TYPE	FUEL BUNDLE GEOMETRY	PEAK TECHNICAL SPECIFICATION LINEAR HEAT GENERATION RATE (kW/ft)	DESIGN AXIAL PEAKING FACTOR	INITIAL MINIMUM CRITICAL POWER RATIO	

A more detailed listing of input of each model and its source is presented in Section II of Reference 1 and subsection 6.3 of the FSAR.

\*This power level meets the Appendix K requirement of 102%. The core heatup calculation assumes a bundle power consistent with operation of the highest powered rod at 102% of its Technical Specification LINEAR HEAT GENERATION RATE limit.

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#### BASES

#### .3/4.2.3 MINIMUM CRITICAL POWER RATIO

The required operating limit MCPRs at steady-state operating conditions as specified in Specification 3.2.3 are derived from the established fuel cladding integrity Safety Limit MCPR of 1.06, and an analysis of abnormal operational transients. For any abnormal operating transients analysis evaluation with the initial condition of the reactor being at the steady state operating limit, it is required that the resulting MCPR does not decrease below the Safety Limit MCPR at any time during the transient assuming instrument trip setting given in Specification 2.2.

To assure that the fuel cladding integrity Safety Limit is not exceeded during any anticipated abnormal operational transient, the most limiting transients have been analyzed to determine which result in the largest reduction in CRITICAL POWER RATIO (CPR). The type of transients evaluated were loss of flow, increase in pressure and power, positive reactivity insertion, and coolant temperature decrease. The limiting transient yields the largest delta MCPR. When added to the Safety Limit MCPR of 1.06, the required minimum operating limit MCPR of Specification 3.2.3 is obtained and presented in Figure 3.2.3-1.

The MCPR curves illustrated in Figure 3.2.3-1 were derived as described above for the following assumed operating conditions:

- Curve A MCPR limit with the main turbine bypass system and moisture separator reheater available. This represents a total reactor steam flow bypass capability of approximately 36 percent.
- Curve B MCPR limit with the main turbine bypass system inoperative or moisture separator reheater inoperative. This represents a total reactor steam flow bypass capability of approximately 10 percent or 26 percent, respectively.
- Curve C MCPR limit with both the main turbine bypass system and moisture separator reheater inoperative. This represents no reactor steam flow bypass capability.

Curve A provides the MCPR limit assuming operation above 25-percent RATED THERMAL POWER with both the moisture separator reheater and main turbine bypass system operable. The curve was developed based upon the operating MCPR limits for a Rod Withdrawal Error transient (UFSAR, Section 15.4.2) and a Main Turbine Trip with Turbine Bypass Failure transient (UFSAR, Section 15.2.3). The analysis of the Main Turbine Trip with Turbine Bypass Failure takes credit for the steam flow to the moisture separator reheater.

Curve B provides the MCPR limit assuming operation above 25-percent RATED THERMAL POWER with the moisture separator reheater operable and the main turbine bypass system inoperable. The curve was developed based upon the

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#### BASES

#### MINIMUM CRITICAL POWER RATIO (Continued)

operating MCPR limits for a Feedwater Controller Failure with Inoperable Turbine Bypass transient. The analysis of the Feedwater Controller Failure transient also takes credit for steam flow to the moisture separator reheater.

Operation with the main turbine bypass inoperable or with a moisture separator reheater inoperable results in a total reactor steam flow bypass capability of approximately 10 percent and 26 percent, respectively. The impact of operation with the moisture separator reheater inoperable but with bypass operable and utilization of Curve B is conservative because the 26 percent bypass capability is less limiting with regard to the existing analysis used to establish Curve B which assumes only 10 percent bypass capability (with the main turbine bypass system inoperable). Therefore, the operation above 25-percent RATED THERMAL POWER with either the moisture separator reheater inoperable or main turbine bypass system inoperable is bounded by the existing Curve B.

Curve C provides the MCPR limit assuming operation above 25-percent RATED THERMAL POWER with both the moisture separator reheater and main turbine bypass system inoperable. The curve was developed based upon the operating MCPR limits for a Feedwater Controller Failure with Inoperable Turbine Bypass transient assuming no steam flow through the moisture separator reheater.

There is no mode change restraint should the main turbine bypass or the moisture separator reheater be inoperable. However, should the main turbine bypass system or the moisture separator reheater be inoperable as 25-percent RATED THERMAL POWER is exceeded, the MCPR check must be completed within one hour.

The evaluation of a given transient begins with the system initial parameters shown in UFSAR Table 15.0-1 that are input to a GE-core dynamic behavior transient computer program. The code used to evaluate pressurization events is described in NED0-24154<sup>(3)</sup> and the program used in nonpressurization events is described in NED0-10802<sup>(2)</sup>. The outputs of this program along with the initial MCPR form the input for further analyses of the thermally limiting bundle with the single channel transient thermal hydraulic TASC code described in NEDE-25149<sup>(4)</sup>. The principal result of this evaluation is the reduction in MCPR caused by the transient.

The purpose of the  $K_f$  factor of Figure 3.2.3-2 is to define operating limits at other than rated core flow conditions. At less then 100% of rated flow the required MCPR is the product of the MCPR and the  $K_f$  factor. The  $K_f$  factors assure that the Safety Limit MCPR will not be violated during a flow increase transient resulting from a motor-generator speed control failure. The  $K_f$  factors may be applied to both manual and automatic flow control modes.

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#### BASES

## MINIMUM CRITICAL POWER RATIO (Continued)

The K<sub>f</sub> factor values shown in Figure 3.2.3-2 were developed generically and are applicable to all BWR/2, BWR/3, and BWR/4 reactors. The K<sub>f</sub> factors were derived using the flow control line corresponding to RATED THERMAL POWER at rated core flow.

For the manual flow control mode, the  $K_f$  factors were calculated such that for the maximum flow rate, as limited by the pump scoop tube setpoint and the corresponding THERMAL POWER along the rated flow control line, the limiting bundle's relative power was adjusted until the MCPR changes with different core flows. The ratio of the MCPR calculated at a given point of core flow, divided by the operating limit MCPR, determines the  $K_f$ .

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#### PLANT SYSTEMS

#### BASES

#### 3/4.7.9 MAIN TURBINE BYPASS SYSTEM AND MOISTURE SEPARATOR REHEATER

The main turbine bypass system is an active bypass system designed to open the bypass valves in the event of a turbine trip to decrease the severity of the pressure transient. Each valve is sized to pass a nominal 13 percent reactor steam flow in the full-open position for a controlled total bypass of approximately 26 percent reactor steam flow. The main turbine bypass system is required to be OPERABLE consistent with the assumptions of the Feedwater Controller Failure analysis.

The primary purpose of the moisture separator reheater is to improve cycle efficiency by using primary system steam to heat the high pressure turbine exhaust before it enters the low-pressure turbines. In doing so, it also provides a passive steam bypass flow of about 10 percent that mitigates the early effects of over-pressure transients. The moisture separator reheater is required to be OPERABLE consistent with the assumptions of the Main Turbine Trip with Turbine Bypass Failure analysis and the Feedwater Controller Failure analysis.

The operation with one or both of the main turbine bypasses inoperable or the moisture separator reheater inoperable to perform preventive or corrective maintenance above 25 percent RATED THERMAL POWER, requires, after one hour, the evaluation of the MCPR in accordance with Specification 3.2.3. If the MCPR is within the bounds established by Specification 3.2.3, power increases to or operation above 25 percent RATED THERMAL POWER is allowed.

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Figure B3/4.7.3-1 ARRANGEMENT OF SHORE BARRIER SURVEY POINTS

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

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

# RELATED TO AMENDMENT NO.39 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 January 27, 1988 as supplemented May 10, 1989, 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 revise Technical Specifications 3/4.2.3 and 3/4.7.9 and Bases 3/4.2.3 and 3/4.7.9 to clarify the bases of operation with a Moisture Separator Reheater (MSR) out-of-service. Specifically, the amendment would (1) modify Technical Specification 3/4.7.9 by specifying operating limitations of the MSR; (2) demonstrate conservatism to the existing transient analysis and clarify that the limits in Technical Specification 3/4.2.3, Figure 3.2.3-1 (Curve B), bound the operating scenario for the MSR out-of-service; and (3) provide an additional limitation (Curve C) to Technical Specification 3/4.2.3, Figure 3.2.3-1, for the operating scenario of an inoperable main turbine bypass and MSR out-of-service.

#### 2.0 EVALUATION

In the Updated Final Safety Analysis (UFSAR) Fermi-2 takes credit for the Moisture Separator Reheater (MSR) in the transient analysis. However, the current Technical Specifications do not indicate or restrict operation with a MSR out-of-service. The proposed Technical Specifications will allow plant operation with a MSR out-of-service. The proposed change request:

- A. Modifies Technical Specification 3/4.7.9 by specifying operation limitations of the MSR.
- B. Demonstrates conservatism to the existing transient analysis and clarifies that the limits in Technical Specifications 3/4.2.3, Figure 3.2.3.1 (Curve B) bounds the operating scenario for the MSR out-of-service.

C. Provides an additional limitation (Curve C) to Technical Specification 3.4.2.3, Figure 3.2.3-1 for the operating scenario of an inoperable main turbine bypass and MSR out of service.

8909150039 890901 PDR ADOCK 05000341 PDC PDC The primary purpose of the MSR is to improve cycle efficiency by using primary system steam to heat the high pressure turbine exhaust before it enters the low-pressure turbines. In doing so, it also provides a passive steam bypass flow of about 10 percent that mitigates the early effects of over-pressure transients. MSR is required to be OPERABLE consistent with the assumptions of the Main Turbine Trip with Turbine Bypass Failure analysis and the Feedwater Controller Failure analysis.

The proposed Technical Specification Section 3/4.7.9 adds MSR to the Limiting Conditions of Operation (LCO). Since Fermi-2 takes credit for MSR in the transient analysis, MSR is included in the LCO. Therefore, the proposed Technical Specification change in 3/4.7.9 and the bases is acceptable.

The title of 3/4.7.9 on pages 3/4 7-40 and B 3/4 7-5 is changed to "Main Turbine Bypass System and Moisture Separator Reheater" to reflect the actual content of the section.

Technical Specification 3/4.2.3, Figure 3.2.3-1 Curve A provides the Minimum Critical Power Ratio (MCPR) limit assuming operation above 25 percent rated thermal power with both the MSR and main turbine system operable. Hence, the title for Curve-A in Figure 3.2.3-1 is changed to "MCPR Limit with Main Turbine Bypass and Moisture Separator Reheater" to indicate the operating condition with both.

Technical Specification 3/4.2.3, Figure 3.2.3.1, Curve B is based on the Feedwater Controller Failure with inoperable Turbine Bypass (26 percent capacity) transient analysis. This analysis bounds the case for MSR inoperable when only 10 percent bypass capability is assumed to be lost. Hence, the present Curve-B is bounding for either the Loss of Turbine Bypass capability or the Loss of MSR. The proposed title for Curve-B applying the Curve-B for situations without Main Turbine Bypass or without Moisture Separator Reheater is acceptable.

The proposed Curve-C in Figure 3.2.3.1 provides the MCPR Limit with both the Turbine Bypass and MSR inoperable. The curve was developed based upon the Limiting Feedwater Controller Failure with no Steam Flow Bypass through Turbine Bypass or MSR. The calculated MCPR 1.28 for this scenario is sufficiently higher than the MCPR Safety Limit of 1.06. The staff finds this acceptable.

The Feedwater Controller Failure Analysis described above was performed with the same approved models used in the FSAR. The staff finds this acceptable.

Based on the evaluation the staff finds the proposed changes in Technical Sp\_\_\_fication Sections 3/4.2.3, 3/4.7.9 Figure 3.2.3-1 bases for 3/4.2.3 and 3/4.7.9 are acceptable as stated above.

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## 3.0 ENVIRONMENTAL CONSIDERATION

Pursuant to 10 CFR 51.21, 51.32 and 51.35, an environmental assessment and finding of no significant impact have been prepared and published in the <u>Federal Register</u> on August 31, 1989 (54 FR 36069) . Accordingly, based upon the environmental assessment, we have determined that the issuance of this amendment will not have a significant effect on the quality of the human environment.

#### 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: G. Thomas

Date: September 1, 1989

# UNITED STATES NUCLEAR REGULATORY COMMISSION DETROIT EDISON COMPANY WOLVERINE POWER SUPPLY COOPERATIVE, INC. DOCKET NO. 50-341 NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

The U.S. Nuclear Regulatory Commission (Commission) has issued Amendment No. <sup>39</sup> to Facility Operating License No. NPF-43 issued to Detroit Edison Company (the licensee), which revised the Technical Specifications for operation of Fermi-2, located in Monroe County, Michigan.

The amendment is effective as of the date of issuance.

The amendment modified the Technical Specifications (TS) to clarify the TS for operation with the Moisture Separator Reheater (MSR) out-of-service.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment.

Notice of Consideration of Issuance of Amendment and Opportunity for Hearing in connection with this action was published in the FEDERAL REGISTER on April 5, 1988 (53 FR 11151). No request for a hearing or petition for leave to intervene was filed following this notice.

The Commission has prepared and Environmental Assessment related to the action and has determined not to prepare an environmental impact statement. Based upon the environmental assessment, the Commission has concluded that the

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issuance of this amendment will not have a significant effect on the quality of the human behavior environment.

For further details with respect to the action see (1) the application for amendment dated January 27, 1988, and supplemented May 10, 1989, (2) Amendment No. 39 to License No. NPF-43, (3) the Commission's related Safety Evaluation, and (4) the Commission's Environmental Assessment. All of these items are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street N.W., Washington, D.C. and at the Local Public Document Room. A copy of items (2), (3) and (4) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Reactor Projects - III, IV, V & Special Projects.

Dated at Rockville, Maryland this 1st day of September 1989.

FOR THE NUCLEAR REGULATORY COMMISSION

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