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

January 28, 1987

Docket No. 50-341

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

Dear Mr. Sylvia:

Subject: Issuance of Amendment No. 5 to Facility Operating License No. NPF-43, Fermi-2

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 5 to Facility Operating License No. NPF-43 for the Fermi-2 facility. This amendment is in response to your letter dated September 30, 1986.

This amendment revises the Fermi-2 Technical Specifications 4.1.3.5.b.1.b), changing the upper limit for the pressure detectors' alarm calibration set-point of each control rod drive scram accumulator to be greater than or equal to 940 psig.

A copy of the related safety evaluation supporting Amendment No. 5 to Facility Operating License No. NPF-43 is also enclosed.

Sincerely,

Elinor G. Adensam

Elinor G. Adensam, Director
BWR Project Directorate No. 3
Division of BWR Licensing

Enclosures:
1. Amendment No. 5 to Facility Operating License No. NPF-43
2. Safety Evaluation

cc w/enclosures:
See next page

DESIGNATED ORIGINAL

Certified By

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Mr. B. Ralph Sylvia
Detroit Edison Company

Fermi-2 Facility

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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. 5
License No. NPF-43

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:

   A. The application for amendment filed by the Detroit Edison Company (DECo or the licensee), dated September 30, 1986, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's 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 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 set forth in 10 CFR Chapter I;

   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 enclosure to this license amendment; and paragraph 2.C.(2) of Facility Operating License No. NPF-43 is hereby amended to read as follows:

   (2) Technical Specifications and Environmental Protection Plan

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 5, 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 amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Elinor G. Adensam

Elinor G. Adensam, Director
BWR Project Directorate No. 3
Division of BWR Licensing

Enclosure:
Changes to the Technical
Specifications

Date of Issuance: January 28, 1987

ENCLOSURE TO LICENSE AMENDMENT NO. 5

FACILITY OPERATING LICENSE NO. NPF-43

DOCKET NO. 50-341

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

REMOVE	INSERT
3/4 1-9	3/4 1-9 (overleaf page)
3/4 1-10	3/4 1-10

CONTROL ROD SCRAM ACCUMULATORS

LIMITING CONDITION FOR OPERATION

3.1.3.5 All control rod scram accumulators shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 5*.

ACTION:

a. In OPERATIONAL CONDITION 1 or 2:

1. With one control rod scram accumulator inoperable, within 8 hours:

   a) Restore the inoperable accumulator to OPERABLE status, or
   b) Declare the control rod associated with the inoperable accumulator inoperable.

   Otherwise, be in at least HOT SHUTDOWN within the next 12 hours.

2. With more than one control rod scram accumulator inoperable, declare the associated control rods inoperable and:

   a) If the control rod associated with any inoperable scram accumulator is withdrawn, immediately verify that at least one control rod drive pump is operating by inserting at least one withdrawn control rod at least one notch. If no control rod drive pump is operating: 1) If reactor pressure is $\geq$ 900 psig, restart at least one control rod drive pump within 20 minutes or place the reactor mode switch in the Shutdown position. 2) If reactor pressure is < 900 psig, place the reactor mode switch in the Shutdown position.

   b) Insert the inoperable control rods and disarm the associated control valves either:

      1) Electrically, or
      2) Hydraulically by closing the drive water and exhaust water isolation valves.

      Otherwise, be in at least HOT SHUTDOWN within 12 hours.

b. In OPERATIONAL CONDITION 5*:

1. With one withdrawn control rod with its associated scram accumulator inoperable, insert the affected control rod and disarm the associated directional control valves within 1 hour, either:

   a) Electrically, or
   b) Hydraulically by closing the drive water and exhaust water isolation valves.

2. With more than one withdrawn control rod with the associated scram accumulator inoperable and no control rod drive pump operating, immediately place the reactor mode switch in the Shutdown position.

c. The provisions of Specification 3.0.4 are not applicable.

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*At least the accumulator associated with each withdrawn control rod. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2.

SURVEILLANCE REQUIREMENTS

4.1.3.5 Each control rod scram accumulator shall be determined OPERABLE:

a. At least once per 7 days by verifying that the indicated pressure is greater than or equal to 940 psig unless the control rod is inserted and disarmed or scrammed.

b. At least once per 18 months by:

1. Performance of a:

a) CHANNEL FUNCTIONAL TEST of the leak detectors, and

b) CHANNEL CALIBRATION of the pressure detectors, and verifying an alarm setpoint of greater than or equal to 940 psig on decreasing pressure.

2. Measuring and recording the time for at least 10 minutes that each individual accumulator check valve maintains the associated accumulator pressure above the alarm set point with no control rod drive pump operating.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 5 TO FACILITY OPERATING LICENSE NO. NPF-43

DETROIT EDISON COMPANY

WOLVERINE POWER SUPPLY COOPERATIVE, INCORPORATED

FERMI-2

DOCKET NO. 50-341

1.0 INTRODUCTION

The Control Rod Drive (CRD) System provides high pressure charging water to the CRD mechanism piston to allow reactor scram when required. During normal plant operation, reactor pressure provides the necessary driving force required to insert the control rods during a scram. When the plant is not at full operating pressure, each CRD scram accumulator provides the needed motive force for control rod insertion. To ensure that each accumulator has sufficient stored energy, the accumulator nitrogen gas pressure must be greater than or equal to 940 psig. Accumulator pressure is verified weekly per the surveillance requirement of Technical Specification (TS) 3.1.3.5 which addresses the CRD scram accumulators. Additionally, an alarm is provided (via pressure switches) to ensure that between these weekly surveillances, the pressure is maintained at or above 940 psig. Each accumulator pressure detector is currently set to alarm at 940+30, -0 psig on decreasing pressure per TS 4.1.3.5.b.1.b). However, the upper limit of 970 has not provided sufficient flexibility to avoid inadvertent scram.

By letter dated September 30, 1986, the licensee advised that CRD scram accumulator pressure switches at Fermi-2 have actuated below their TS limits during surveillance testing. The licensee proposed to change the existing plant TS 4.1.3.5.b.1.b). This would revise the pressure alarm calibration requirement for the pressure detectors to a set point value of greater than or equal to 940 psig without a maximum upper limit set point to allow a sufficiently high set point to preclude spurious scram. The licensee justified the requested revision by stating that the change would allow an increase in the pressure switch (detector) set point to provide adequate instrument drift allowance so that sufficient nitrogen pressure is maintained for the required scram performance. The licensee also stated that increasing the alarm setpoint will not affect or change the original design basis for the CRD hydraulic system (CRDHS). Also, all associated equipment associated with the CRDHS will continue to perform its design function.

2.0 EVALUATION

The staff has reviewed the submittal and the associated justification for the requested revision of TS 4.1.3.5.b.1.b). Based on the review, the staff agrees that the proposed revision is conservative in the sense that, with the revision, the alarm set point value for the pressure detector could be equal to or higher than the currently existing range of set point

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values and could consequently give the same or earlier warning of a scram accumulator low pressure. The staff also finds that while the proposed revision would allow the licensee greater operational flexibility, it would not compromise the operability of either a scram accumulator or its associated pressure detector. The staff, concludes that the proposed revision of TS 4.1.3.5.b.1.b) for Fermi-2, relating to the range of alarm set point values for the pressure detectors associated with Control Rod Drive System scram accumulators, is acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation and use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes in surveillance requirements. The staff has determined that this 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 impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

4.0 CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the FEDERAL REGISTER (51 FR 43679) on December 3, 1986, and consulted with the state of Michigan. No public comments were received, and the state of Michigan did not have any comments.

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: Donald Katze, NRR

Dated: January 28, 1987

AMENDMENT NO. 5 TO FACILITY OPERATING LICENSE NO. NPF-43
Fermi, Unit 2

DISTRIBUTION:

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