August 19, 1988

Docket No. 50-341

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

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	WShafer, RIII

Dear Mr. Sylvia:

SUBJECT: AMENDMENT NO. 28 TO FACILITY OPERATING LICENSE NO. NPF-43: STANDBY GAS TREATMENT SYSTEM RADIATION MONITORS AND CONTAINMENT HIGH RANGE RADIATION MONITOR (TAC NO. 66744)

The Commission has issued the enclosed Amendment No.28 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 November 30, 1987 (NRC-87-0216).

The amendment revises the provisions in the Technical Specifications with respect to the Standby Gas Treatment System Radiation Monitors and the Containment High Range Radiation Monitor.

Copies of the Safety Evaluation supporting this amendment and the notice of issuance are also enclosed.

Sincerely,

Theodore R. Quay

Theodore R. Quay, Project Manager
Project Directorate III-1
Division of Reactor Projects - III, IV, V
& Special Projects

Enclosures:
1. Amendment No. 28 to NPF-43
2. Safety Evaluation
3. Notice of Issuance

cc w/enclosures:
See next page

PRPB*

DFO1

LA/PD31:DRSP	PM/PD31:DRSP	D/PD31:DRSP	OGC
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7/20/88	7/20/88	7/20/88	7/21/88

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* See attached f/concurrence.

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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,

Theodore R. Quay

Theodore R. Quay, Project Manager
Project Directorate III-1
Division of Reactor Projects - III, IV, V
& Special Projects

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PRPB LJC 7/19/88

LA/PD31:DRSP	PM/PD31:DRSP	D/PD31:DRSP	OGC
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

August 19, 1988

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:

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Sincerely,

Theodore R. Quay

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Project Directorate III-1
Division of Reactor Projects - III, IV, V
& Special Projects

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2. Safety Evaluation
3. Notice of Issuance

cc w/enclosures:
See next page

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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. 28
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 30, 1987, 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. 28 , 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

Martin J. Virgilio, Director
Project Directorate III-1
Division of Reactor Projects - III, IV, V
& Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 19, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 28

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.

REMOVE	INSERT
3/4 3-61	3/4 3-61
3/4 3-62	3/4 3-62
B 3/4 3-4	B 3/4 3-4

TABLE 3.3.7.5-1

ACCIDENT MONITORING INSTRUMENTATION

INSTRUMENT	REQUIRED NUMBER OF CHANNELS	MINIMUM CHANNELS OPERABLE	APPLICABLE OPERATIONAL CONDITIONS	ACTION
1. Reactor Vessel Pressure	2	1	1, 2	80
2. Reactor Vessel Water Level, Fuel Zone	2	1	1, 2	80
3. Suppression Chamber Water Level	2	1	1, 2	80
4. Suppression Chamber Water Temperature	2	1	1, 2	80
5. Suppression Chamber Air Temperature	2	1	1, 2	80
6. Suppression Chamber Pressure	2	1	1, 2	80
7. Drywell Pressure, Wide Range	2	1	1, 2	80
8. Drywell Air Temperature	2	1	1, 2	80
9. Drywell Oxygen Concentration***	2	1	1, 2	80
10. Drywell Hydrogen Concentration	2	1	1, 2	80
11. Safety/Relief Valve Position Indicators	1*/valve	1*/valve	1, 2	80
12. Containment High Range Radiation Monitor	2	2	1, 2, 3	81
13. Standby Gas Treatment System Radiation Monitors**	2	2	1, 2, 3	81
14. Neutron Flux	2	1	1, 2	80
15. Drywell Sump Level	2	1	1, 2	80
16. Primary Containment Isolation Valve Position	1/valve	1/valve	1, 2, 3	80

*Pressure switch

**High (accident) range noble gas monitors (One channel per flow path)

***See Special Test Exception 3.10.5

TABLE 3.3.7.5-1 (Continued)

ACCIDENT MONITORING INSTRUMENTATION

ACTION STATEMENTS

ACTION 80 -

a. With the number of OPERABLE accident monitoring instrumentation channels less than the Required Number of Channels shown in Table 3.3.7.5-1, restore the inoperable channel(s) to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours.

b. With the number of OPERABLE accident monitoring instrumentation channels less than the Minimum Channels OPERABLE requirements of Table 3.3.7.5-1, restore the inoperable channel(s) to OPERABLE status within 48 hours or be in at least HOT SHUTDOWN within the next 12 hours.

ACTION 81 - With the number of OPERABLE channels less than required by the minimum channels OPERABLE requirements, initiate the preplanned alternate method of monitoring the appropriate parameter(s) within 72 hours, and:

1) either restore the inoperable channel(s) to OPERABLE status within 7 days of the event, or

2) prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within 14 days following the event outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

3/4.3.4 ATWS RECIRCULATION PUMP TRIP SYSTEM ACTUATION INSTRUMENTATION

The anticipated transient without scram (ATWS) recirculation pump trip system provides a means of limiting the consequences of the unlikely occurrence of a failure to scram during an anticipated transient. The response of the plant to this postulated event falls within the envelope of study events in General Electric Company Topical Report NEDO-10349, dated March 1971, NEDO-24222, dated December 1979, and Appendix 15B.8 of the FSAR.

Operation with a trip set less conservative than its Trip Setpoint but within its specified Allowable Value is acceptable on the basis that the difference between each Trip Setpoint and the Allowable Value is equal to or less than the drift allowance assumed for each trip in the safety analyses.

3/4.3.5 REACTOR CORE ISOLATION COOLING SYSTEM ACTUATION INSTRUMENTATION

The reactor core isolation cooling system actuation instrumentation is provided to initiate actions to assure adequate core cooling in the event of reactor isolation from its primary heat sink and the loss of feedwater flow to the reactor vessel without providing actuation of any of the emergency core cooling equipment.

Operation with a trip set less conservative than its Trip Setpoint but within its specified Allowable Value is acceptable on the basis that the difference between each Trip Setpoint and the Allowable Value is equal to or less than the drift allowance assumed for each trip in the safety analyses.

3/4.3.6 CONTROL ROD BLOCK INSTRUMENTATION

The control rod block functions are provided consistent with the requirements of the specifications in Section 3/4.1.4, Control Rod Program Controls and Section 3/4.2 Power Distribution Limits. The trip logic is arranged so that a trip in any one of the inputs will result in a control rod block.

Operation with a trip set less conservative than its Trip Setpoint but within its specified Allowable Value is acceptable on the basis that the difference between each Trip Setpoint and the Allowable Value is equal to or less than the drift allowance assumed for each trip in the safety analyses.

3/4.3.7 MONITORING INSTRUMENTATION

3/4.3.7.1 RADIATION MONITORING INSTRUMENTATION

The OPERABILITY of the radiation monitoring instrumentation ensures that; (1) the radiation levels are continually measured in the areas served by the individual channels; (2) the alarm or automatic action is initiated when the radiation level trip setpoint is exceeded; and (3) sufficient information is available on selected plant parameters to monitor and assess these variables following an accident. This capability is consistent with 10 CFR Part 50, Appendix A, General Design Criteria 19, 41, 60, 61, 63, 64.

MONITORING INSTRUMENTATION (Continued)

3.4.3.7.2 SEISMIC MONITORING INSTRUMENTATION

The OPERABILITY of the seismic monitoring instrumentation ensures that sufficient capability is available to promptly determine the magnitude of a seismic event and evaluate the response of those features important to safety. This capability is required to permit comparison of the measured response to that used in the design basis for the unit. This instrumentation is consistent with the recommendations of Regulatory Guide 1.12, "Instrumentation for Earthquakes," April 1974.

3/4.3.7.3 METEOROLOGICAL MONITORING INSTRUMENTATION

The OPERABILITY of the meteorological monitoring instrumentation ensures that sufficient meteorological data are available for estimating potential radiation doses to the public as a result of routine or accidental release of radioactive materials to the atmosphere. This capability is required to evaluate the need for initiating protective measures to protect the health and safety of the public. This instrumentation is consistent with the recommendations of Regulatory Guide 1.23, "Onsite Meteorological Programs," February, 1972.

3/4.3.7.4 REMOTE SHUTDOWN SYSTEM INSTRUMENTATION AND CONTROLS

The OPERABILITY of the remote shutdown monitoring instrumentation ensures that sufficient capability is available to permit shutdown and maintenance of HOT SHUTDOWN of the unit from locations outside of the control room. This capability is required in the event control room habitability is lost and is consistent with General Design Criterion 19 of 10 CFR Part 50.

3/4.3.7.5 ACCIDENT MONITORING INSTRUMENTATION

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess important variables following an accident. This capability is consistent with the recommendations of Regulatory Guide 1.97, "Instrumentation for Light Water Cooled Nuclear Power Plants to Assess Plant Conditions During and Following an Accident," December 1975 and NUREG-0737, "Clarification of TMI Action Plan Requirements," November 1980.

The multiple noble gas monitors installed on each division of the Standby Gas Treatment System provide the necessary monitoring capabilities to assure that the normal and extended monitoring ranges required by NUREG-0737 and Regulatory Guide 1.97 are met.

3/4.3.7.6 SOURCE RANGE MONITORS

The source range monitors provide the operator with information of the status of the neutron level in the core at very low power levels during startup and shutdown. At these power levels, reactivity additions shall not be made without this flux level information available to the operator. When the intermediate range monitors are on scale, adequate information is available without the SRMs and they can be retracted.

3/4.3.7.7 TRAVERSING IN-CORE PROBE SYSTEM

The OPERABILITY of the traversing in-core probe system with the specified minimum complement of equipment ensures that the measurements obtained from use of this equipment accurately represent the spatial neutron flux distribution of the reactor core.

The TIP system OPERABILITY is demonstrated by normalizing all probes (i.e., detectors) prior to performing an LPRM calibration function. Monitoring core thermal limits may involve utilizing individual detectors to monitor selected areas of the reactor core, thus all detectors may not be required to be OPERABLE. The OPERABILITY of individual detectors to be used for monitoring is demonstrated by comparing the detector(s) output with data obtained during the previous LPRM calibration.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 28TO 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 30, 1987, the Detroit Edison Company (DECo or the licensee) requested an amendment to the Technical Specifications (TSs) appended to Facility Operating License No. NPF-43 for Fermi-2. The proposed amendment would revise the Technical Specification 3/4.3.7.5, Table 3.3.7.5-1, Accident Monitoring Instrumentation, to require that a minimum of two channels, instead of one channel, be operable for the Standby Gas Treatment System (SGTS) Radiation Monitors (i.e., requiring one channel per flow path to be operable) to ensure that appropriate compensatory actions are taken to preclude conditions which have the potential for allowing unmonitored release of noble gases. In addition, the proposed amendment would revise: (1) the associated Action Statement 81 in Table 3.3.7.5-1 for the SGTS Radiation Monitors and Containment High Range Radiation Monitor to extend the time period before the licensees are required to submit a Special Report to the Commission (pursuant to Section 6.9.2 of the Technical Specifications) as recommended in NRC Generic Letter 83-36; and (2) make appropriate changes in the Technical Specification Bases for Accident Monitoring Instrumentation as a result of the change. While Generic Letter 83-36 preceded the license issuance, the Fermi-2 TSs were under development in parallel with the Generic Letter. Due to an omission, this change was not incorporated into the TSs issued with the Fermi-2 license.

2.0 EVALUATION

The SGTS radiation monitoring system measures the radioactivity in the exhaust vent lines from the SGTS after an accident has occurred and prior to discharge to the environment. The current Fermi-2 Technical Specifications require only one channel to be operable out of a total number of two channels. The licensee determined that requiring only one channel operable out of a total of two channels presents a condition which has the potential for allowing unmonitored releases because the Fermi-2 design has two redundant flow paths which exhaust via a single vent stack to the environment. Each of the SGTS flow paths has a dedicated accident range noble gas monitor, and should that monitor become inoperable, the associated SGTS flow path would not be monitored.

The intent of Technical Specification 3.3.7.5 is to take compensatory measures within 72 hours when no accident range radiation monitor is available in the operable SGTS flow path.

This action would prohibit the condition for an unmonitored release. However, the current Technical Specifications only require compensatory actions when both radiation monitors are inoperable. Should one monitor become inoperable, no compensatory action is required and a condition would exist which has the potential for allowing unmonitored releases. The requested change would correct this deficiency.

In addition, the licensee proposed to revise compensatory action (Action 81) to extend the time period from 72 hours to 7 days before a Special Report is required to be prepared and submitted (within 14 days following the event) to the Commission. The basis for the Special Report is to allow the Commission to assess potential generic problems with the monitoring system by requiring the licensee to outline the cause of the inoperability, the actions taken and the planned schedule for restoring the system to an operable status. The licensee proposed to extend the time period upon which a Special Report would be required to be written because of the requested change to require two operable SGTS Radiation Monitors. The proposed change would place the system in a situation of more frequently entering the compensatory action statement as a result of one monitor rather than two becoming inoperable.

We conclude that the changes are acceptable because 1) the proposed Action Statement 81 is taken directly from Generic Letter 83-36 of NUREG-0737 and 2) they upgrade the actions required by the present Technical Specifications.

3.0 ENVIRONMENTAL CONSIDERATION

An Environmental Assessment and Finding of No Significant Impact has been issued for this amendment (53 FR 30358, August, 1988).

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 Contributors: Wayne Meinke/Ted Quay

Dated: August 19, 1988

7590-01

UNITED STATES NUCLEAR REGULATORY COMMISSION

DETROIT EDISON COMPANY

WOLVERINE POWER SUPPLY COOPERATIVE, INCOPORATED

DOCKET NO. 50-341

NOTICE OF ISSUANCE OF AMENDMENT TO

FACILITY OPERATING LICENSE

The United States Nuclear Regulatory Commission (the Commission) has issued Amendment No. 28 to Facility Operating License No. NPF-43, issued to the Detroit Edison Company and Wolverine Power Supply Cooperative, Inc. (the licensees), which revised the Technical Specifications (TSs) for operation of Fermi-2, located in Monroe County, Michigan. The amendment is effective as of the date of issuance.

The amendment changes the Technical Specifications to require two channels, instead of one, to be operable for the Standby Gas Treatment System Radiation Monitors. In addition, the amendment revises Action Statement 81 in Table 3.3.7.5-1 as recommended in NRC Generic Letter 83-36 and makes appropriate changes in the Technical Specification Bases as a result of the change.

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 to Facility Operating License and Opportunity for Hearing in connection with this action was published in the FEDERAL REGISTER on March 10, 1988 (53 FR 7819). No

request for hearing or petition to intervene was filed following this notice.

Also in connection with this action, the Commission prepared an Environmental Assessment and Finding of No Significant Impact which was published in the FEDERAL REGISTER on August 11, 1988, at 53 FR 30358 .

For further details with respect to this action, see (1) the application for amendment dated November 30, 1987, (2) Amendment No. 28 to License No. NPF-43, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, NW., Washington, DC 20555, and at the Monroe County Library System, 3700 South Custer Road, Monroe, Michigan 48161. A copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Director, Division of Reactor Projects - III, IV, V, and Special Projects.

Dated at Rockville, Maryland, this 19th day of August 1988.

FOR THE NUCLEAR REGULATORY COMMISSION

Theodore R. Quay

Theodore R. Quay, Project Manager
Project Directorate III-1
Division of Reactor Projects - III, IV, V
& Special Projects