



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

March 2, 1987

Docket No. 50-341

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

Dear Mr. Sylvia:

Subject: Issuance of Amendment No. 7 to Facility Operating License
No. NPF-43, Fermi-2

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 7 to Facility Operating License No. NPF-43 for the Fermi-2 facility. This amendment is in response to your letter (VP-86-0132) dated October 24, 1986.

The amendment revises the Fermi-2 Technical Specification 4.7.2.e.2.c) and d) deleting the surveillance of the Radwaste Building ventilation exhaust radiation monitor and the Turbine Building ventilation exhaust radiation monitor, respectively, for the control room emergency filtration system.

A copy of the related safety evaluation supporting Amendment No. 7 to Facility Operating License No. NPF-43 is enclosed.

Sincerely,

Elinor G. Adensam

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

Enclosures:

1. Amendment No. 7 to NPF-43
2. Safety Evaluation

cc w/enclosure:
See next page

DESIGNATED ORIGINAL

Certified By *gk*

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Mr. R. Ralph Sylvia
Detroit Edison Company

Fermi-2 Facility

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AMENDMENT NO. 7 TO FACILITY OPERATING LICENSE NO. NPF-43 - FERMI, UNIT 2

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UNITED STATES
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DETROIT EDISON COMPANY

WOLVERINE POWER SUPPLY COOPERATIVE, INCORPORATED

DOCKET NO. 50-341

FERMI-2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 7
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 October 24, 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. 7, 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 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: March 2, 1987

ENCLOSURE TO LICENSE AMENDMENT NO. 7

FACILITY OPERATING LICENSE NO. NPF-43

DOCKET NO. 50-341

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. 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

3/4 7-9
3/4 7-10

INSERT

3/4 7-9 (overleaf page)
3/4 7-10

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS

- 4.7.2. The control room emergency filtration system shall be demonstrated OPERABLE:
- a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to 95°F.
 - b. At least once per 31 days on a STAGGERED TEST BASIS by initiating fan operation from the control room, and establishing flow through the HEPA filters and charcoal adsorbers, and verifying that the system operates for at least 10 hours with the associated emergency makeup inlet air heater OPERABLE.
 - c. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire, or chemical release in any ventilation zone communicating with the system by:
 1. Verifying that the system satisfies the in-place penetration testing acceptance criteria of less than 1.0% and uses the test procedure guidance in Regulatory Positions C.5.a, C.5.c, and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the system at a flow rate of 1800 cfm + 10% through the makeup filter and 3000 cfm ± 10% through the recirculation filter.
 2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978, for a methyl iodide penetration of less than 1.0%; and
 3. Verifying a system flow rate of 3000 cfm + 10% during system operation when tested in accordance with ANSI N510-1980.
 - d. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978, for a methyl iodide penetration of less than 1.0%.
 - e. At least once per 18 months by:
 1. Verifying that the pressure drop across the recirculation train and across the makeup train combined HEPA filters and charcoal adsorber banks is less than 8 inches and 6 inches water gauge respectively while operating the system at a flow rate of 3000 cfm + 10% through the recirculation filter train and 1800 cfm ± 10% through the makeup filter train.
 2. Verifying that the system will automatically switch to the recirculation mode of operation on each of the below actuation test signals and verifying that on any one of the below recirculation mode actuation test signals, the system automatically switches to the recirculation mode of operation, the isolation valves close within 5 seconds and the control room is maintained at a

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

positive pressure of at least 0.125 inch water gauge relative to the outside atmosphere during system operation at a flow rate less than or equal to 1800 cfm through the emergency makeup air filter:

- a) Control center inlet radiation monitor.
 - b) Reactor Building ventilation exhaust radiation monitor
 - c) Fuel pool ventilation exhaust radiation monitor.
 - d) Low reactor water level.
 - e) High drywell pressure.
3. Verifying that on the chlorine mode actuation signal, the system automatically switches to the chlorine mode of operation, the isolation valves close within 4 seconds, and a minimum of 1200 cfm emergency recirculation is established.
 4. Verifying that each of the emergency makeup inlet air heaters dissipate 12.0 ± 2.0 kW when tested in accordance with ANSI N510-1980.
- f. After each complete or partial replacement of a train HEPA filter bank by verifying that the train HEPA filter bank satisfies the inplace penetration and bypass leakage testing acceptance criteria of less than 1.0% in accordance with ANSI N510-1980 while operating the system at a flow rate of $1800 \text{ cfm} + 10\%$ for the makeup train and $3000 \text{ cfm} \pm 10\%$ for the recirculation train.
 - g. After each complete or partial replacement of a train charcoal adsorber bank by verifying that the train charcoal adsorber bank satisfies the inplace penetration and bypass leakage testing acceptance criteria of less than 1.0% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of $1800 \text{ cfm} + 10\%$ for the makeup train and $3000 \text{ cfm} \pm 10\%$ for the recirculation train.



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WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 7 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 October 24, 1986, the licensee proposed to eliminate the radwaste and turbine building exhaust radiation monitor signals with respect to the control room HVAC system. Presently, in accordance with Technical Specification Sections (TS) 3/4.7.2 and 4.7.2.e.2, these signals are two of several that are used to place the HVAC system in an emergency mode when high radiation is indicated. This evaluation deals with the acceptability of the proposed TS change.

2.0 EVALUATION

The staff's acceptance of the Fermi-2 control room HVAC design with respect to General Design Criterion (GDC) 19 is based, in part, on the provision of an adequate means of signaling and actuating the control room emergency ventilation mode. Specifically, the staff found that signals from the control room outside air radiation monitors, as well as the reactor protection signals, are sufficient to initiate the control room HVAC emergency ventilation mode, such that the dose guidelines of GDC 19 are met with respect to all design basis airborne radioactivity release accidents, including the LOCA.

The additional emergency ventilation signals, as listed in Technical Specification 3/4.7.2, are not necessary to meet GDC 19 requirements and, hence, represent signals of marginal importance. However, the radiation monitors in the radwaste and turbine buildings have generated spurious signals which have initiated the control room HVAC emergency ventilation mode unnecessarily. The proposed elimination of these signals does not affect the protection of the control room operators against the potential radiation releases from the radwaste and turbine buildings. As indicated above, the staff's findings are that reliance on control room air intake and reactor protection signals is sufficient with respect to meeting GDC 19 requirements. On this basis, the staff concludes that the proposed TS change is acceptable. The licensee has committed to retaining the exhaust vent monitors for these buildings, such that any radiation release exceeding TS limits will still isolate these buildings automatically.

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3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the 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 which 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 41850) on November 19, 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: J. Levine, NRR

Dated: March 2, 1987