August 5, 1991

Docket No. 50-341

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Mr. William S. Orser
Senior Vice President - Nuclear Operations
Detroit Edison Company
6400 North Dixie Highway
Newport, Michigan 48166

Dear Mr. Orser:

SUBJECT: AMENDMENT NO. 73 TO FACILITY OPERATING LICENSE NO. NPF-43: (TAC NO. 77681)

The Commission has issued the enclosed Amendment No. 73 to Facility Operating License No. NPF-43 for the Fermi-2 facility. This amendment consists of changes to the Plant Technical Specification (TS) in response to your letter dated November 15, 1988 as supplemented November 16, 1989 and September 11, 1990.

The amendment clarifies the accident monitoring instrumentation requirements of the TS to eliminate confusion with the current TS and better reflect Fermi-2 compliance with regulatory requirements specifically, for the Standby Gas Treatment System.

A copy of our Safety Evaluation is also enclosed. The notice of issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

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

Enclosures:
1. Amendment No. 73 to NPF-43
2. Safety Evaluation

cc w/enclosures:
See next page

LA/PD31:DRP345	PM/PD31:DRP345	D/PD31:DRP345	OGC
PShuttleworth	JStang	LMarsh	
7/23/91	7/23/91	8/5/91	7/24/91

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OGC concurrence subject to adding noted language to 1.0 of SE

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

DETROIT EDISON COMPANY

FERMI-2

DOCKET NO. 50-341

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 73
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 as supplemented November 16, 1989 and September 11, 1990, 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. 73, 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 its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

L. B. Marsh, Director
Project Directorate III-1
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 5, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 73

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 6-61a
3/4 3-63	3/4 3-63 3/4 6-63a
3/4 3-77	3/4 3-77
*3/4 3-78	*3/4 3-78
3/4 3-80	3/4 3-80

*Overleaf page provided to maintain document completeness. No changes contained in these pages.

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				
a. Fuel Zone	2	1	1, 2	80
b. Wide Range	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

* Pressure switch

TABLE 3.3.7.5-1 (Continued)

ACCIDENT MONITORING INSTRUMENTATION

INSTRUMENT	REQUIRED NUMBER OF CHANNELS	MINIMUM CHANNELS OPERABLE	APPLICABLE OPERATIONAL CONDITIONS	ACTION
13. Standby Gas Treatment System Radiation Monitors				
a. SGTS - Noble Gas (Low-range)#	1/OPERABLE SGTS subsystem	1/OPERABLE SGTS subsystem	1, 2, 3	81
b. SGTS - Noble Gas (Mid-range)	1/OPERABLE SGTS subsystem	1/OPERABLE SGTS subsystem	1, 2, 3	81
c. SGTS - AXM-Noble Gas (Mid-range)	1/OPERABLE SGTS subsystem	1/OPERABLE SGTS subsystem	1, 2, 3	81
d. SGTS - AXM-Noble Gas (High-range)	1/OPERABLE SGTS subsystem	1/OPERABLE SGTS subsystem	1, 2, 3	81
14. Neutron Flux	2	1	1, 2	80
15. Deleted				
16. Primary Containment Isolation Valve Position	1/valve	1/valve	1, 2, 3	82

#Also included in Table 3.3.7.12-1, Item 3.a.

TABLE 4.3.7.5-1

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION	APPLICABLE OPERATIONAL CONDITIONS
1. Reactor Vessel Pressure	M	R	1, 2
2. Reactor Vessel Water Level			
a. Fuel Zone	M	R	1, 2
b. Wide Range	M	R	1, 2
3. Suppression Chamber Water Level	M	R	1, 2
4. Suppression Chamber Water Temperature	M	R	1, 2
5. Suppression Chamber Air Temperature	M	R	1, 2
6. Suppression Chamber Pressure	M	R	1, 2
7. Drywell Pressure, Wide Range	M	R	1, 2
8. Drywell Air Temperature	M	R	1, 2
9. Drywell Oxygen Concentration	M	R	1, 2
10. Drywell Hydrogen Concentration	M	Q*	1, 2
11. Safety/Relief Valve Position Indicators	M	R	1, 2
12. Containment High Range Radiation Monitor	M	R**	1, 2, 3

*Using sample gas containing:
a. One volume percent hydrogen, balance nitrogen.
b. Four volume percent hydrogen, balance nitrogen.

**CHANNEL CALIBRATION shall consist of an electronic calibration of the channel, not including the detector, for range decades above 10 R/hr and a one point calibration check of the detector below 10 R/hr with an installed or portable gamma source.

TABLE 4.3.7.5-1 (Continued)

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION	APPLICABLE OPERATIONAL CONDITIONS
13. Standby Gas Treatment System Radiation Monitors			
a. SGTS - Noble Gas (Low-range)	M	R	1, 2, 3
b. SGTS - Noble Gas (Mid-range)	M	R	1, 2, 3
c. SGTS - AXM-Noble Gas (Mid-range)	M	R	1, 2, 3
d. SGTS - AXM-Noble Gas (High-range)	M	R	1, 2, 3
14. Neutron Flux	M	R	1, 2
15. Deleted			
16. Primary Containment Isolation Valve Position	M	R	1, 2, 3

TABLE 3.3.7.12-1

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

	INSTRUMENT	MINIMUM CHANNELS OPERABLE	APPLICABILITY	ACTION
1.	REACTOR BUILDING EXHAUST PLENUM EFFLUENT MONITORING SYSTEM			
	a. Noble Gas Activity Monitor - Providing Alarm	1	*	121
	b. Iodine Sampler	1	*	122
	c. Particulate Sampler	1	*	122
	d. Sampler Flow Rate Monitor	1	*	123
2.	OFFGAS MONITORING SYSTEM (At the 2.2 minute delay piping)			
	a. Hydrogen Monitor	1	**	124
	b. Noble Gas Activity Monitor	1	***	126
3.	STANDBY GAS TREATMENT SYSTEM			
	a. Noble Gas Activity Monitor[##] - Providing Alarm	1	#	125
	b. Iodine Sampler	1	#	122
	c. Particulate Sampler	1	#	122
	d. Sampler Flow Rate Monitor	1	#	123

TABLE 3.3.7.12-1 (Continued)

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

	INSTRUMENT	MINIMUM CHANNELS OPERABLE	APPLICABILITY	ACTION
4.	TURBINE BLDG. VENTILATION MONITORING SYSTEM			
	a. Noble Gas Activity Monitor	1	*	121
	b. Iodine Sampler	1	*	122
	c. Particulate Sampler	1	*	122
	d. Sampler Flow Rate Monitor	1	*	123
5.	SERVICE BUILDING VENTILATION MONITORING SYSTEM			
	a. Noble Gas Activity Monitor	1	*	121
	b. Iodine Sampler	1	*	122
	c. Particulate Sampler	1	*	122
	d. Sampler Flow Rate Monitor	1	*	123

TABLE 3.3.7.12-1 (Continued)

TABLE NOTATIONS

* At all times.
** During main condenser offgas treatment system operation.
***During operation of the main condenser air ejector.
During operation of the standby gas treatment system.
Also included in Table 3.3.7.5-1, Item 13.a.

ACTION STATEMENTS

ACTION 121 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, effluent releases via this pathway may continue provided grab samples are taken at least once per 12 hours and these samples are analyzed for gross activity within 24 hours. Otherwise, suspend release of radioactive effluents via this pathway.

ACTION 122 - With the number of channnels OPERABLE one less than required by the Minimum Channels OPERABLE requirement, effluent releases via this pathway may continue provided that within 8 hours samples are continuously collected with auxiliary sampling equipment as required in Table 4.11.2.1.2-1.

ACTION 123 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, effluent releases via this pathway may continue provided the flow rate is estimated at least once per 4 hours. Otherwise, suspend release of radioactive effluents via this pathway.

ACTION 124 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, operation of main condenser offgas treatment system may continue provided grab samples are collected at least once per 4 hours and analyzed within the following 4 hours. Otherwise, suspend release of radioactive effluents via this pathway.

ACTION 125 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, effluent releases via this pathway may continue provided grab samples are taken at least once per 4 hours and these samples are analyzed for gross activity within 24 hours. Otherwise, suspend release of radioactive effluents via this pathway.

ACTION 126 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, releases via this pathway to the environment may continue for up to 7 days provided that:

a. The offgas system is not bypassed, and

b. The reactor building exhaust plenum noble gas effluent (downstream) monitor is OPERABLE;

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

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. TO FACILITY OPERATING LICENSE NO. NPF-43

DETROIT EDISON COMPANY

FERMI-2

DOCKET NO. 50-341

1.0 INTRODUCTION

By letter dated November 15, 1988 as supplemented November 16, 1989 and September 11, 1990, the Detroit Edison Company (DECo or the licensee) requested amendment to the Technical Specifications (TS) appended to Facility Operating License No. NPF-43 for Fermi-2. The proposed amendment would clarify the accident monitoring instrumentation requirements of the TS for the Standby Gas Treatment System Radiation Monitoring. The supplemental letters provided clarifying information that did not change the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

By letter dated November 15, 1988 and supplemented by letter dated November 16, 1989, DECo requested an amendment to the TS for Fermi-2. The proposed changes included accident monitoring instrumentation (3.4.3.7.5). The reasons for the proposed changes were to eliminate confusion with current TS and better reflect Fermi-2 compliance with regulatory requirements. In addition, the proposed changes allow the TS to better reflect the as-built conditions of the plant. By letter dated September 10, 1990, the NRC staff accepted a portion of the proposed changes to TS, however, the proposed changes concerning the Standby Gas Treatment Systems (SGTS) radiation monitors were not approved. By letter dated September 11, 1990, DECo submitted alternative wording to change the TS concerning the SGTS.

The current TS wording concerning SGTS in Table 3/4.3.7.5-1 is not clear and creates confusion with respect to TS compliance. Hence, by letter dated November 15, 1988, and supplemented by letter of November 16, 1989, DECo proposed changes to the TS Table 3/4.3.7.5-1 which included the list of all radiation monitors for the SGTS. However, the staff was of the opinion that the TS wording proposed by DECo for the "Required Number of Channels" and "Minimum Channels Operable" were still not clear. The problem is that under these headings, the number of required channels is specified as 2 and the footnote (**) for these monitors specifies one per operable SGTS subsystem. This creates confusion unless the person is exceedingly familiar with the SGTS system.

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 radiation monitors in the SGTS system are located in the ductwork of each subsystem rather than a common ductwork. Hence, these monitors are dedicated to each SGTS subsystem and are not redundant to each other regardless of the SGTS subsystem in service.

By letter dated September 11, 1990, DECo proposed changes to Table 3.3.7.5-1 under the heading of "Required Number of Channels" and "Minimum Channels Operable" from 2 to 1/Operable SGTS subsystem and deleted the old footnote (**). The staff feels that this change will clarity the intent of the TS. DECo also changed the old footnote (***) which cross references to Table 3.3.7.12-1, Item 3.a for low range Noble Gas Monitor to new footnote (**) as old footnote (**) is deleted. The licensee has also added a cross reference in Table 3.3.7.12-1, Item 3.a (Pages 3/4 3-77 and 3/4 3-80) to Table 3.3.7.5-1, Item 13.a. The proposed changes only clarify the intent of the TS and do not change any requirements.

The proposed changes enhance safety by providing a detailed listing of the radiation monitors for the SGTS and clarifying the intent of the TS, thus eliminating the possibility of a nonconservative misinterpretation of the TS. The proposed changes to the TS reflects the radiation monitors used at Fermi-2 to comply with regulatory requirements and allows the TS to better reflect the Fermi-2 configuration for SGTS.

The supplemental information provided in the licensee's November 16, 1989, and September 11, 1990, submittals were solely to amend the proposed wording for the SGTS Radiation Monitoring Instrumentation. The basis for the conclusion that the November 15, 1988, application does not involve a significant hazards consideration is unaffected by the proposed formatting changes discussed in the supplemental submittals because the intent of the original submittal remains unchanged.

Based on the above evaluation the staff finds the proposed changes to the TS are acceptable.

STATE CONSULTATION

In accordance with the Commission's regulations, the Michigan State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or 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 the 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 the amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 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 the amendment.

5.0 CONCLUSION

The staff has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: W. Garg

Date: August 5, 1991