August 1, 1994

Docket No. 50-341

Mr. Douglas R. Gipson
Senior Vice President
Nuclear Generation
Detroit Edison Company
6400 North Dixie Highway
Newport, Michigan 48166

Dear Mr. Gipson:

SUBJECT: FERMI-2 - ISSUANCE OF AMENDMENT RE: FERMI 2 - GENERIC LETTER (GL) 91-08 - REMOVAL OF COMPONENT LISTS FROM TECHNICAL SPECIFICATIONS (TAC NO. M89445)

The Commission has issued the enclosed Amendment No. 102 to Facility Operating License No. NPF-43 for the Fermi-2 facility. The amendment consists of changes to the Technical Specifications (TS) in response to your letter dated May 10, 1994.

The amendment revises the Fermi-2 TS to remove the list of primary containment isolation valves (Table 3.6.3-1) and the motor-operated valves thermal overload protection list (Table 3.8.4.3-1) from TS. The amendment also modifies TS that reference these lists to reflect their removal. The lists will be incorporated into plant procedures which are subject to the administrative controls of TS 6.5.3 and 6.8 in accordance with the guidance of GL 91-08.

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,

Original signed by

Timothy G. Colburn, Sr. Project Manager
Project Directorate III-1
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No.102 to NPF-43
2. Safety Evaluation

cc w/enclosures:
See next page

OFFICE	LA:PD31	PM:PD31	OGC	D:PD31
NAME	CJamerson	TColburn:gll	EHoller	LBMarsh
DATE	07/6/94	07/8/94	07/14/94	07/29/94

OFFICIAL RECORD COPY FILENAME: G:\WPDOCS\FERMI\FE89445.AMD

cc:

John Flynn, Esquire
Senior Attorney
Detroit Edison Company
2000 Second Avenue
Detroit, Michigan 48226

Nuclear Facilities and Environmental
Monitoring Section Office
Division of Radiological Health
Department of Public Health
3423 N. Logan Street
P. O. Box 30195
Lansing, Michigan 48909

U.S. Nuclear Regulatory Commission
Resident Inspector Office
6450 W. Dixie Highway
Newport, Michigan 48166

Monroe County Office of Civil
Preparedness
963 South Raisinville
Monroe, Michigan 48161

Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
801 Warrenville Road
Lisle, Illinois 60532-4351

Ms. Lynne S. Goodman
Director - Nuclear Licensing
Detroit Edison Company
Fermi-2
6400 North Dixie Highway
Newport, Michigan 48166

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

DETROIT EDISON COMPANY

DOCKET NO. 50-341

FERMI-2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 102
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 May 10, 1994, 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. 102 , 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 with full implementation within 45 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Marsha Gamberoni for

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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 1, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 102

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 vertical lines indicating the area of change.

REMOVE	INSERT
xiv	xiv
xxiv	xxiv
xxv	xxv
1-5	1-5
3/4 3-11	3/4 3-11
3/4 3-12	3/4 3-12
3/4 3-13	3/4 3-13
3/4 3-14	3/4 3-14
3/4 3-14a	3/4 3-14a
3/4 6-1	3/4 6-1
3/4 6-2	3/4 6-2
3/4 6-3	3/4 6-3
3/4 6-5	3/4 6-5*
3/4 6-6	3/4 6-6
3/4 6-19	3/4 6-19*
3/4 6-20	3/4 6-20
3/4 6-21	3/4 6-21
3/4 6-22 through 3/4 6-48	3/4 6-22
	3/4 6-48*
3/4 8-19	3/4 8-19*
3/4 8-20	3/4 8-20
3/4 8-21 through 3/4 8-24	3/4 8-21
	--
B 3/4 6-5	B 3/4 6-5*
B 3/4 6-6	B 3/4 6-6
--	B 3/4 6-6a

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

INDEX

BASES

INDEX

LIST OF TABLES (Continued)

LIST OF TABLES (Continued)

2. Closed by at least one manual valve, blank flange, or deactivated automatic valve secured in its closed position, except for valves that are open under administrative control as permitted by Specification 3.6.3.

b. All primary containment equipment hatches are closed and sealed.

c. Each primary containment air lock is in compliance with the requirements of Specification 3.6.1.3.

d. The primary containment leakage rates are within the limits of Specification 3.6.1.2.

e. The suppression chamber is in compliance with the requirement of Specification 3.6.2.1.

f. The sealing mechanism associated with each primary containment penetration, e.g., welds, bellows, or O-rings, is OPERABLE.

g. The suppression chamber to reactor building vacuum breakers are in compliance with Specification 3.6.4.2.

THE PROCESS CONTROL PROGRAM

1.30 The PROCESS CONTROL PROGRAM (PCP) shall contain the current formulas, sampling, analyses, test, and determinations to be made to ensure that processing and packaging of solid radioactive wastes based on demonstrated processing of actual or simulated wet solid wastes will be accomplished in such a way as to assure compliance with 10 CFR Parts 20, 61, and 71, State regulations, burial ground requirements, and other requirements governing the disposal of solid radioactive waste.

PURGE - PURGING

1.31 PURGE or PURGING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration or other operating condition, in such a manner that replacement air or gas is required to purify the confinement.

RATED THERMAL POWER

1.32 RATED THERMAL POWER shall be a total reactor core heat transfer rate to the reactor coolant of 3430 MWT.

TABLE 3.3.2-1

ISOLATION ACTUATION INSTRUMENTATION

TRIP FUNCTION	MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM[a]	APPLICABLE OPERATIONAL CONDITION	ACTION
1. PRIMARY CONTAINMENT ISOLATION			
a. Reactor Vessel Low Water Level			
1) Level 3 ##	2	1, 2, 3	20
2) Level 2 [d]	2	1, 2, 3	20
3) Level 1	2	1, 2, 3	20
b. Drywell Pressure - High ##	2	1, 2, 3	20
c. Main Steam Line			
1) Radiation - High##	2	1, 2, 3	21
2) Pressure - Low	2	1	22
3) Flow - High	2	1, 2, 3	21
d. Main Steam Line Tunnel Temperature - High	2[c]	1, 2, 3	21
e. Condenser Pressure - High	2	1, 2**, 3**	21
f. Turbine Bldg. Area Temperature - High	2	1, 2, 3	21
g. Deleted			
h. Manual Initiation	1/valve	1, 2, 3	26

TABLE 3.3.2-1 (Continued)
ISOLATION ACTUATION INSTRUMENTATION

TRIP FUNCTION	MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM[a]	APPLICABLE OPERATIONAL CONDITION	ACTION
2. REACTOR WATER CLEANUP SYSTEM ISOLATION			
a. Δ Flow - High #	1[h]	1, 2, 3	23
b. Heat Exchanger/Pump/High Energy Piping Area Temperature - High	6	1, 2, 3	23
c. Heat Exchanger/Pump/Phase Separator Area Ventilation Δ Temp. - High	2	1, 2, 3	23
d. SLCS Initiation	NA	1, 2, 3	23
e. Reactor Vessel Low Water Level - Level 2	2	1, 2, 3	23
f. Deleted			
g. Manual Initiation	1/valve	1, 2, 3	26
3. REACTOR CORE ISOLATION COOLING SYSTEM ISOLATION			
a. RCIC Steam Line Flow - High			
1. Differential Pressure	1	1, 2, 3	23
2. Time Delay	1	1, 2, 3	23
b. RCIC Steam Supply Pressure - Low[f]	2	1, 2, 3	23
c. RCIC Turbine Exhaust Diaphragm Pressure - High	2	1, 2, 3	23
d. RCIC Equipment Room Temperature - High	1	1, 2, 3	23
e. Manual Initiation	1/valve	1, 2, 3	26

TABLE 3.3.2-1 (Continued)
ISOLATION ACTUATION INSTRUMENTATION

TRIP FUNCTION	MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM[a]	APPLICABLE OPERATIONAL CONDITION	ACTION
4. HIGH PRESSURE COOLANT INJECTION SYSTEM ISOLATION			
a. HPCI Steam Line Flow - High			
1. Differential Pressure	1	1, 2, 3	23
2. Time Delay	1	1, 2, 3	23
b. HPCI Steam Supply Pressure - Low [g]	2	1, 2, 3	23
c. HPCI Turbine Exhaust Diaphragm Pressure - High	2	1, 2, 3	23
d. HPCI Equipment Room Temperature - High	1	1, 2, 3	23
e. Manual Initiation	1/valve	1, 2, 3	26
5. RHR SYSTEM SHUTDOWN COOLING MODE ISOLATION			
a. Reactor Vessel Low Water Level - Level 3##	2	1, 2, 3	25
b. Reactor Vessel (Shutdown Cooling Cut-in Permissive Interlock) Pressure - High	1	1, 2, 3	25
c. Manual Initiation	1/valve	1, 2, 3	26
6. SECONDARY CONTAINMENT ISOLATION			
a. Reactor Vessel Low Water Level - Level 2 [b] ***	2	1, 2, 3, and *	24
b. Drywell Pressure - High [b] *** ##	2	1, 2, 3	24
c. Fuel Pool Ventilation Exhaust Radiation - High [b]***	2	1, 2, 3, and *	24
d. Manual Initiation [b]***	1[i]	1, 2, 3, and *	27

TABLE 3.3.2-1 (Continued)
ISOLATION ACTUATION INSTRUMENTATION

ACTION STATEMENTS

ACTION 20 - Be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.

ACTION 21 - Be in at least STARTUP with the associated isolation valves closed within 6 hours or be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.

ACTION 22 - Be in at least STARTUP within 6 hours.

ACTION 23 - Close the affected system isolation valves within 1 hour and declare the affected system inoperable.

ACTION 24 - Establish SECONDARY CONTAINMENT INTEGRITY with the standby gas treatment system operating within 1 hour.

ACTION 25 - Disable in the closed position the affected system isolation valves within 1 hour and declare the shutdown cooling mode of RHR inoperable.

ACTION 26 - Restore the manual initiation function to OPERABLE status within 8 hours or close the affected system isolation valves within the next hour and declare the affected system inoperable.

ACTION 27 - Restore the manual initiation function to OPERABLE status within 8 hours or establish SECONDARY CONTAINMENT INTEGRITY with the Standby Gas Treatment System operating.

TABLE NOTATIONS

* When handling irradiated fuel in the secondary containment, during CORE ALTERATIONS, or during operations with a potential for draining the reactor vessel.

** The high condenser pressure input to the isolation actuation instrumentation may be bypassed during reactor shutdown or for reactor startup when condenser pressure is above the trip setpoint.

*** Actuates dampers shown in Table 3.6.5.2-1.

(a) A channel may be placed in an inoperable status for up to 6 hours for required surveillance without placing the channel or trip system in the tripped condition provided at least one other OPERABLE channel in the same trip system is monitoring that parameter. In addition, for the HPCI system and RCIC system isolation, provided that the redundant isolation valve, inboard or outboard, as applicable, in each line is OPERABLE and all required actuation instrumentation for that valve is OPERABLE, one channel may be placed in an inoperable status for up to 8 hours for required surveillance without placing the channel or trip system in the tripped condition.

(b) Also starts the standby gas treatment system.

(c) A channel is OPERABLE if 2 of 4 detectors in that channel are OPERABLE.

(d) Deleted.

(e) Deleted.

TABLE 3.3.2-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION

TABLE NOTATIONS (Continued)

(f) Isolates with simultaneous RCIC Steam Supply Pressure-Low (Isolation Instrumentation) and Drywell Pressure-High (ECCS Actuation Instrumentation).

(g) Isolates with simultaneous HPCI Steam Supply Pressure-Low (Isolation Actuation Instrumentation) and Drywell Pressure-High (ECCS Actuation Instrumentation).

(h) This trip function is derived from three non-redundant flow transmitters and a non-redundant flow summer. Inoperability of the non-redundant circuitry causes the channels in both trip systems to be inoperable. The remaineder of the circuit is redundant and can be considered on a per trip system basis. Both trip systems may be placed in an inoperable status for up to 2 hours for required surveillance of the non-redundant circuitry without taking the required ACTION provided that the remainder of the Reactor Water Cleanup System Isolation channels (except the SLCS Initiation) are OPERABLE.

(i) Secondary Containment Isolation Push-buttons.

(j) Deleted.

\# With time delay of 45 seconds.

\## These trip function(s) are common to the RPS trip function.

3/4.6 CONTAINMENT SYSTEMS
3/4.6.1 PRIMARY CONTAINMENT
PRIMARY CONTAINMENT INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.1 PRIMARY CONTAINMENT INTEGRITY shall be maintained.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2* and 3.

ACTION:

Without PRIMARY CONTAINMENT INTEGRITY, restore PRIMARY CONTAINMENT INTEGRITY within 1 hour or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.1 PRIMARY CONTAINMENT INTEGRITY shall be demonstrated:

a. After each closing of each penetration subject to Type B testing, except the primary containment air locks, if opened following Type A or B test, by leak rate testing the seals with gas at P_a, 56.5 psig, and verifying that when the measured leakage rate for these seals is added to the leakage rates determined pursuant to Surveillance Requirement 4.6.1.2.b for all other Type B and C penetrations, the combined leakage rate is less than or equal to 0.60 L_a.

b. At least once per 31 days by verifying that all primary containment penetrations except those inside the containment or in locked high radiation areas (listed in Table 4.6.1.1-1) not capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions are closed by locked closed valves, blank flanges, or deactivated automatic valves secured in position, except for valves that are open under administrative control as permitted by Specification 3.6.3.

   1. Valves, flanges, and deactivated automatic valves which are located inside the containment, and are locked, sealed or otherwise secured in the closed position shall be verified closed during each COLD SHUTDOWN except such verification need not be performed when the primary containment has not been deinerted since the last verification or more often than once per 92 days.

*See Special Test Exception 3.10.1.

3.6.1.2 Primary containment leakage rates shall be limited to:

a. An overall integrated leakage rate of less than or equal to: L_a, 0.5 percent by weight of the containment air per 24 hours at P_a, 56.5 psig.

b. A combined leakage rate of less than or equal to 0.60 L_a for all primary containment penetrations and all primary containment isolation valves, except for main steam line isolation valves* and primary containment isolation valves which are hydrostatically tested, subject to Type B and C tests when pressurized to Pa, 56.5 psig.

c. *Less than or equal to 100 scf per hour for all four main steam lines when tested at 25.0 psig.

d. A combined leakage rate of less than or equal to 5 gpm for all containment isolation valves in hydrostatically tested lines which penetrate the primary containment, when tested at 1.10 P_a, 62.2 psig.

e. Less than or equal to 1 gpm times the number of valves per penetration not to exceed 3 gpm per penetration for any line penetrating containment and hydrostatically tested at 1.10 P_a, 62.2 psig.

APPLICABILITY: When PRIMARY CONTAINMENT INTEGRITY is required per Specification 3.6.1.1.

ACTION:
With:

a. The measured overall integrated primary containment leakage rate exceeding 0.75 L_a, or
b. The measured combined leakage rate for all primary containment penetrations and all primary containment isolation valves, except for main steam line isolation valves* and primary containment isolation valves which are hydrostatically tested, subject to Type B and C tests exceeding 0.60 L_a, or
c. The measured leakage rate exceeding 100 scf per hour for all four main steam lines, or
d. The measured combined leakage rate for all containment isolation valves in hydrostatically tested lines which penetrate the primary containment exceeding 5 gpm, or
e. The leakage rate of any hydrostatically tested line penetrating primary containment exceeding 1 gpm per isolation valve times the number of containment isolation valves per penetration or greater than 3 gpm per penetration,

prior to increasing reactor coolant system temperature above 200°F, restore:

a. The overall integrated leakage rate(s) to less than or equal to 0.75 L_a, and

*Exemption to Appendix J of 10 CFR Part 50.

LIMITING CONDITION FOR OPERATION (Continued)

ACTION: (Continued)

b. The combined leakage rate for all primary containment penetrations and all primary containment isolation valves, except for main steam line isolation valves* and primary containment isolation valves which are hydrostatically tested, subject to Type B and C tests to less than or equal to 0.60 L_a, and

c. The leakage rate to less than or equal to 100 scf per hour for all four main steam lines, and

d. The combined leakage rate for all containment isolation valves in hydrostatically tested lines which penetrate the primary containment to less than or equal to 5 gpm, and

e. The leakage rate of any hydrostatically tested line penetrating primary containment to less than 1 gpm per isolation valve times the number of containment isolation valves per penetration or less than 3 gpm per penetration.

SURVEILLANCE REQUIREMENTS

4.6.1.2 The primary containment leakage rates shall be demonstrated at the following test schedule and shall be determined using the methods and provisions described herein:

a. Integrated Primary Containment Leakage Rate - Type A Test

1. Integrated leak rate tests shall be performed at the test pressure (P_a) of 56.5 psig. Containment pressure shall not be permitted to decrease more than 1 psi below P_a.

2. Type A tests should be completed prior to Type B and C tests. If Type B and C tests are conducted prior to Type A test, then the Type A test results shall have added to it the difference between the "as found" vs. "as left" leakages for all penetrations. Type B and C leakages not accounted for in the Type A test shall be added to the upper confidence limit (UCL) to estimate the overall integrated leakage rate. However, when adding the leakage rate measured during a Type C test to the results of a Type A test, the lower leakage rate of the two isolation valves in a line shall be used.

10. The accuracy of each Type A test shall be verified by a supplemental test which:

    (a) Confirms the accuracy of the test by verifying that the difference between the supplemental data and the Type A test data is within 0.25 L_a.

    (b) Has duration sufficient to establish accurately the change in leakage rate between the Type A test and the supplemental test.

    (c) Requires that the rate of gas injected into the containment or bled from the containment during the supplemental test to be equivalent to at least 75% but not more than 125% of L_a at P_a, 56.5 psig,

b. Type B and C tests shall be conducted# with gas at P_a, 56.5 psig*, at intervals no greater than 24 months** except for tests involving:

    1. Air locks,
    2. Main steam line isolation valves,
    3. Penetrations using continuous leakage monitoring systems,
    4. Valves pressurized with fluid from a seal system,
    5. ECCS and RCIC containment isolation valves in hydrostatically tested lines which penetrate the primary containment, and
    6. Purge supply and exhaust isolation valves with resilient material seals.

c. Air locks shall be tested and demonstrated OPERABLE per Specification 4.6.1.3.

d. Main steam line isolation valves shall be leak tested at least once per 18 months.

e. Type B tests for penetrations employing a continuous leakage monitoring system shall be conducted at P_a, 56.5 psig, at intervals no greater than once per 3 years.

f. Leakage from isolation valves that are sealed with fluid from a seal system may be excluded, subject to the provisions of Appendix J, Section III.C.3, when determining the combined leakage rate provided the seal system and valves are pressurized to at least 1.10 P_a, 62.2 psig, and the seal system capacity is adequate to maintain system pressure for at least 30 days.

*Unless a hydrostatic test is required.
**With the exception of valves E11-F009, E11-F408 and E11-F608 for which the surveillance interval has been extended until startup from the first refueling outage late in 1989.
#Except for LPCI Loop A and B Injection Isolation valves, which are hydrostatically tested in accordance with Specification 4.4.3.2.2 in lieu of this requirement.

3/4.6.3 PRIMARY CONTAINMENT ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.6.3 Each primary containment isolation valve and reactor instrumentation line excess flow check valve shall be OPERABLE.**

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

a. With one or more of the primary containment isolation valves inoperable, maintain at least one isolation valve OPERABLE in each affected penetration that is open and within 4 hours either:

   1. Restore the inoperable valve(s) to OPERABLE status, or

   2. Isolate each affected penetration by use of at least one deactivated automatic valve secured in the isolated position,* or

   3. Isolate each affected penetration by use of at least one locked closed manual valve or blank flange.*

   Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

b. With one or more of the reactor instrumentation line excess flow check valves inoperable, operation may continue and the provisions of Specification 3.0.3 are not applicable provided that within 4 hours either:

   1. The inoperable valve is returned to OPERABLE status, or

   2. The instrument line is isolated and the associated instrument is declared inoperable.

   Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

*Isolation valves closed to satisfy these requirements may be reopened on an intermittent basis under administrative control.
**Locked or sealed closed valves may be opened on an intermittent basis under administrative control.

SURVEILLANCE REQUIREMENTS

4.6.3.1 Each primary containment isolation valve shall be demonstrated OPERABLE prior to returning the valve to service after maintenance, repair or replacement work is performed on the valve or its associated actuator, control or power circuit by cycling the valve through at least one complete cycle of full travel and verifying the isolation time.*

4.6.3.2 Each primary containment automatic isolation valve shall be demonstrated OPERABLE during COLD SHUTDOWN or REFUELING at least once per 18 months by verifying that on a containment isolation test signal each automatic isolation valve actuates to its isolation position.

4.6.3.3 The isolation time of each primary containment power operated or automatic valve shall be determined to be within its limit when tested pursuant to Specification 4.0.5.

4.6.3.4 Each reactor instrumentation line excess flow check valve shall be demonstrated OPERABLE at least once per 18 months by verifying that the valve checks flow.

4.6.3.5 Each traversing in-core probe system explosive isolation valve shall be demonstrated OPERABLE:

a. At least once per 31 days by verifying the continuity of the explosive charge.

b. At least once per 18 months by removing the explosive squib from at least one explosive valve such that the explosive squib in each explosive valve will be tested at least once per 90 months, and initiating the explosive squib. The replacement charge for the exploded squib shall be from the same manufactured batch as the one fired or from another batch which has been certified by having at least one of that batch successfully fired. No squib shall remain in use beyond the expiration of its shelf-life or operating life, as applicable.

*Except for TIP shear valves which are demonstrated OPERABLE per Specification 4.6.3.5.

Table 3.6.3-1 has been deleted.

3/4 6-22 through 3/4 6-47 are "not used."

MOTOR-OPERATED VALVES THERMAL OVERLOAD PROTECTION

LIMITING CONDITION FOR OPERATION

3.8.4.3 The thermal overload protection of each valve used in safety systems shall be OPERABLE.

APPLICABILITY: Whenever the motor-operated valve is required to be OPERABLE.

ACTION:

With the thermal overload protection for one or more of the above required valves inoperable, continuously bypass the inoperable thermal overload within 8 hours or declare the affected valve(s) inoperable and apply the appropriate ACTION statement(s) for the affected system(s).

SURVEILLANCE REQUIREMENTS

4.8.4.3 The thermal overload protection for the above required valves shall be demonstrated OPERABLE at least once per 18 months and following maintenance on the motor starter by the performance of a CHANNEL CALIBRATION of a representative sample of at least 25% of all thermal overloads for the above required valves.

Table 3.8.4.3-1 has been deleted.

3/4 8-21 through 3/4 8-24 are "not used."

DEPRESSURIZATION SYSTEMS (Continued)

examination following any event where potentially high loadings could occur provides assurance that no significant damage was encountered. Particular attention should be focused on structural discontinuities in the vicinity of the relief valve discharge since these are expected to be the points of highest stress.

In addition to the limits on temperature of the suppression chamber pool water, operating procedures define the action to be taken in the event a safety/relief valve inadvertently opens or sticks open. As a minimum this action shall include: (1) use of all available means to close the valve, (2) initiate suppression pool water cooling, (3) initiate reactor shutdown, and (4) if other safety/relief valves are used to depressurize the reactor, their discharge shall be separated from that of the stuck-open safety/relief valve to assure mixing and uniformity of energy insertion to the pool.

3/4.6.3 PRIMARY CONTAINMENT ISOLATION VALVES

The OPERABILITY of the primary containment isolation valves ensures that the containment atmosphere will be isolated from the outside environment in the event of a release of radioactive material to the containment atmosphere or pressurization of the containment and is consistent with the requirements of GDC 54 through 57 of Appendix A of 10 CFR Part 50. Containment isolation within the time limits specified for those isolation valves designed to close automatically ensures that the release of radioactive material to the environment will be consistent with the assumptions used in the analyses for a LOCA.

The opening of locked or sealed closed containment isolation valves on an intermittent basis under administrative control includes the following considerations: (1) stationing an operator, who is in constant communication with the control room, at the valve controls, (2) instructing this operator to close these valves in an accident situation, and (3) assuring that environmental conditions will not preclude access to close the valves and that this action will prevent the release of radioactivity outside the containment.

3/4.6.4 VACUUM RELIEF

Vacuum relief breakers are provided to equalize the pressure between the suppression chamber and drywell and between the Reactor Building and suppression chamber. This system will maintain the structural integrity of the primary containment under conditions of large differential pressures. There are valves to provide redundancy so that operation may continue for up to 72 hours with redundant vacuum breakers inoperable in the closed position.

The vacuum breakers between the suppression chamber and the drywell must not be inoperable in the open position since this would allow bypassing of the suppression pool in case of an accident.

3/4.6.5 SECONDARY CONTAINMENT

Secondary containment is designed to minimize any ground level release of radioactive material which may result from an accident. The reactor building and associated structures provide secondary containment during normal operation when the drywell is sealed and in service. At other times, the drywell may be open and, when required, secondary containment integrity is specified.

Establishing and maintaining a vacuum in the reactor building with the standby gas treatment system once per 18 months, along with the surveillance of the doors, hatches, dampers and valves, is adequate to ensure that there are no violations of the integrity of the secondary containment.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO.102 TO FACILITY OPERATING LICENSE NO. NPF-43

DETROIT EDISON COMPANY

FERMI-2

DOCKET NO. 50-341

1.0 INTRODUCTION

By letter dated May 10, 1994, the Detroit Edison Company (the licensee) requested an amendment to the Technical Specifications (TS) appended to Facility Operating License No. NPF-43 for Fermi-2. The proposed amendment would remove component lists from the TS for primary containment isolation valves (Table 3.6.3-1) and motor-operated valves thermal overload protection (Table 3.8.4.3-1) in accordance with the guidance contained in Generic Letter (GL) 91-08 "Removal of Component Lists From Technical Specifications," dated May 6, 1991.

2.0 EVALUATION

Section 50.36 of Title 10 of the Code of Federal Regulations established the regulatory requirements related to the content of TS. The rule requires that TS include items in specific categories, including safety limits, limiting conditions for operation, and surveillance requirements; however, the rule does not specify the particular requirements to be included in a plant's TS. The NRC developed criteria, as described in the "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors," (58 FR 39132) to determine which of the design conditions and associated surveillances need to be located in the TS. The Final Policy Statement adopted the subjective statement of the Atomic Safety and Licensing Appeal Board, ALAB-531, 9 NRC 263 (1979), (Trojan Nuclear Plant) as the basis for the criteria. The Appeal Board stated,

> "... there is neither a statutory nor a regulatory requirement that every operational detail set forth in an applicant's safety analysis report (or equivalent) be subject to a Technical Specification, to be included in the license as an absolute condition of operation which is legally binding upon the licensee unless and until changed with specific Commission approval. Rather, as best we can discern it, the contemplation of both the Act and the regulations is the Technical Specifications are to be reserved for those matters as to which the imposition of rigid conditions or limitations upon reactor operation is deemed necessary to obviate the possibility of an event giving rise to an immediate threat to the public health and safety."

Briefly, the criteria provided by the Final Policy Statement are: (1) detection of abnormal degradation of the reactor coolant pressure boundary, (2) boundary conditions for design basis accidents and transients, (3) primary success paths to prevent or mitigate design basis accidents and transients, and (4) functions determined to be important to risk or operating experience. The Commission's final policy statement acknowledged that its implementation may result in the relocation of existing TS requirements to licensee controlled documents and programs.

The staff's review of the proposed change determined that the relocation of the Fermi-2 list of primary containment isolation valves (Table 3.6.3-1) and list of safety systems' motor-operated valves thermal overload protection (Table 3.8.4.3-1) does not eliminate the requirements for the licensee to ensure that the primary containment isolation valves and safety systems' motor-operated valves thermal overload protection are capable of performing their safety function. Although the list of primary containment isolation valves and list of safety systems' motor-operated valves thermal overload protection are relocated from the TS to the plant procedures, the licensee must continue to evaluate any changes to the lists in accordance with 10 CFR 50.59. Should the licensee's determination conclude that an unreviewed safety question is involved, due to either (1) an increase in the probability or consequences of accidents or malfunctions of equipment important to safety, (2) the creation of a possibility for an accident or malfunction of a different type than any evaluated previously, or (3) a reduction in the margin of safety, NRC approval and a license amendment would be required prior to implementation of the change. NRC inspection and enforcement programs also enable the staff to monitor facility changes and licensee adherence to updated final safety analysis report commitments and to take any remedial action that may be appropriate.

The staff's review concluded that 10 CFR 50.36 does not require the list of primary containment isolation valves or the list of safety systems' motor-operated valve thermal overload protection to be retained in TS. Requirements related to the operability, applicability, and surveillance requirements, including performance of testing to ensure operability of the containment isolation valves and motor-operated valve thermal overload protection are retained due to these components importance in mitigating the consequences of an accident. However, the staff determined that the inclusion of the list of primary containment isolation valves and the list of safety systems' motor-operated valves thermal overload protection are an operational detail related to the licensee's safety analyses which are adequately controlled by the requirements of 10 CFR 50.59 and TS 6.5.3 and TS 6.8.

Therefore, the continued processing of license amendments related to revisions of the affected TS Tables 3.6.3-1 and 3.8.4.3-1, where the revisions to those requirements do not involve an unreviewed safety question under 10 CFR 50.59, would afford no significant benefit with regard to protecting the public health and safety.

Other related changes to the TS were approved which remove references to Tables 3.6.3-1 and 3.8.4.3-1 and are considered administrative in nature. The requested changes to TS pages 3/4 3-18 and 3/4 3-19 were not needed because

these pages had previously been removed from the TS by the issuance of amendment No. 100 to Facility Operating License No. NPF-43 dated June 29, 1994.

The staff has concluded, therefore, that relocation of the list of primary containment isolation valves (Table 3.6.3-1) and the list of safety systems' motor-operated valves thermal overload protection (Table 3.8.4.3-1) is acceptable because (1) their inclusion in TS is not specifically required by 10 CFR 50.36 or other regulations; (2) Tables 3.6.3-1 and 3.8.4.3-1 will be relocated to plant procedures in accordance with the guidance in GL 91-08, are adequately controlled by 10 CFR 50.59 and TS 6.5.3 and 6.8, and their inclusion in the TS is not required to avert an immediate threat to the public health and safety; and (3) changes that are deemed to involve an unreviewed safety question, will require prior NRC approval in accordance with 10 CFR 50.59(c).

3.0 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. The staff has determined that the 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 the amendment involves no significant hazards consideration and there has been no public comment on such finding (59 FR 29626). Accordingly, the 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 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 Contributors: Timothy G. Colburn
William Reckley

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AMENDMENT NO. 102 TO FACILITY OPERATING LICENSE NO. NPF-43-FERMI-2

Docket File
NRC & Local PDRs
PDIII-1 Reading
J. Roe
J. Zwolinski
L. Marsh
C. Jamerson
T. Colburn
OGC-WF
D. Hagan
G. Hill, T-5C2
C. Grimes, O-11/F/23
W. Reckley
ACRS (10)
OPA
OC/LFDCB, T-4A43
L. Miller, R-III
SEDB

cc: Plant Service list