



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. 105
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 October 2, 1995, 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.

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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. 105, 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



Brian E. Holian, Acting 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: October 13, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 105

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

3/4 3-23
3/4 3-24*
3/4 8-5
3/4 8-6*

INSERT

3/4 3-23
3/4 3-24*
3/4 8-5
3/4 8-6*

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

INSTRUMENTATION

3/4.3.3 EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3 The emergency core cooling system (ECCS) actuation instrumentation channels shown in Table 3.3.3-1 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.3-2.

APPLICABILITY: As shown in Table 3.3.3-1.

ACTION:

- a. With an ECCS actuation instrumentation channel trip setpoint less conservative than the value shown in the Allowable Value column of Table 3.3.3-2, declare the channel inoperable until the channel is restored to OPERABLE status with its trip setpoint adjusted consistent with the Trip Setpoint value.
- b. With one or more ECCS actuation instrumentation channels inoperable, take the ACTION required by Table 3.3.3-1.
- c. With either ADS trip system "A" or "B" inoperable, restore the inoperable trip system to OPERABLE status within:
 1. 7 days, provided that the HPCI and RCIC systems are OPERABLE, otherwise,
 2. 72 hours.

Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and reduce reactor steam dome pressure to less than or equal to 150 psig within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.3.3.1 Each ECCS actuation instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.3.1-1.

4.3.3.2 LOGIC SYSTEM FUNCTIONAL TESTS and simulated automatic operation of all channels shall be performed at least once per 18 months.*

4.3.3.3 The ECCS RESPONSE TIME of each ECCS trip function shall be demonstrated to be within the limit at least once per 18 months. Each test shall include at least one channel per trip system such that all channels are tested at least once every N times 18 months where N is the total number of redundant channels in a specific ECCS trip system.

* For the diesel generator output breakers: Completion of logic system functional testing, for the loss of power function, to positively verify that the breaker reclosure permissive relay (52XX) is re-energized by the associated bus load shedding logic contact closing, rather than the 52XX being re-energized by a parallel path, may be deferred and must be completed no later than during the first plant outage after September 29, 1995.

TABLE 3.3.3-1

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

TRIP FUNCTION	MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM(a)	APPLICABLE OPERATIONAL CONDITIONS	ACTION
1. CORE SPRAY SYSTEM			
a. Reactor Vessel Low Water Level - Level 1	2(b)	1, 2, 3, 4*, 5*	30
b. Drywell Pressure - High	2(b)	1, 2, 3	30
c. Reactor Steam Dome Pressure - Low (Injection Permissive)	2	1, 2, 3	30
d. Manual Initiation	1##	4*, 5*	30
1, 2, 3, 4*, 5*			33
2. LOW PRESSURE COOLANT INJECTION MODE OF RHR SYSTEM			
a. Reactor Vessel Low Water Level - Level 1	2	1, 2, 3, 4*, 5*	30
b. Drywell Pressure - High	2	1, 2, 3	30
c. Reactor Steam Dome Pressure - Low (Valve Permissive)	2	1, 2, 3	30
d. Reactor Vessel Low Water Level - Level 2 (Loop Select Logic)	2	4*, 5*	30
e. Reactor Steam Dome Pressure - Low (Break Detection Logic)	2	1, 2, 3, 4*, 5*	30
f. Riser Differential Pressure - High (Break Detection)	2	1, 2, 3	30
g. Recirculation Pump Differential Pressure - High (Break Detection)	2	1, 2, 3	30
h. Manual Initiation	1##	1, 2, 3	30
1, 2, 3, 4*, 5*			33
3. HIGH PRESSURE COOLANT INJECTION SYSTEM#			
a. Reactor Vessel Low Water Level - Level 2	2	1, 2, 3	30
b. Drywell Pressure - High	2	1, 2, 3	30
c. Condensate Storage Tank Level - Low	2(c)	1, 2, 3	34
d. Suppression Pool Water Level - High	2(d)	1, 2, 3	34
e. Reactor Vessel High Water Level - Level B	2(e)	1, 2, 3	32
f. Manual Initiation	1##	1, 2, 3	33

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

2. Verifying the diesel generator capability to reject a load of greater than or equal to 1666 kW while maintaining engine speed less than the nominal speed plus 75% of the difference between nominal speed and the overspeed trip setpoint or 115% of nominal speed, whichever is lower.
3. Verifying the diesel generator capability to reject a load of 2850 kW without tripping. The generator voltage shall not exceed 4784 volts during and following the load rejection.
4. Simulating a loss-of-offsite power by itself, and:
 - a) Verifying deenergization of the emergency busses and load shedding from the emergency busses.
 - b) Verifying the diesel generator starts on the auto-start signal, energizes the emergency busses with permanently connected loads within 10 seconds, energizes the autoconnected loads through the load sequencer* and operates for greater than or equal to 5 minutes while its generator is loaded with the shutdown loads. After energization, the steady-state voltage and frequency of the emergency busses shall be maintained at 4160 ± 420 volts and 60 ± 1.2 Hz during this test.
5. Verifying that on an ECCS actuation test signal, without loss-of-offsite power, the diesel generator starts on the auto-start signal and operates on standby for greater than or equal to 5 minutes. The generator voltage and frequency shall be 4160 ± 420 volts and 60 ± 1.2 Hz within 10 seconds after the auto-start signal; the steady-state generator voltage and frequency shall be maintained within these limits during this test.
6. Simulating a loss-of-offsite power in conjunction with an ECCS actuation test signal, and:
 - a) Verifying deenergization of the emergency busses and load shedding from the emergency busses.
 - b) Verifying the diesel generator starts on the auto-start signal, energizes the emergency busses with permanently connected loads within 10 seconds, energizes the auto-connected shutdown loads through the load sequencer* and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads. After energization, the steady-state voltage and frequency of the emergency busses shall be maintained at 4160 ± 420 volts and 60 ± 1.2 Hz during this test.

* Completion of testing to verify the 480 volt loads listed in Detroit Edison letter to the NRC, NRC 95-0104 dated October 2, 1995, are energized through the load sequencer and not a parallel path may be deferred and must be completed no later than during the first plant outage after September 29, 1995.

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

7. Verifying that all automatic diesel generator trips, except overspeed, generator differential, low lube oil pressure, crankcase overpressure, and failure to start are automatically bypassed for an emergency start signal.
8. Verifying the diesel generator operates for at least 24 hours. During the first 22 hours of this test, the diesel generator shall be loaded to greater than or equal to an indicated 2500-2600 kW and during the remaining 2 hours of this test, the diesel generator shall be loaded to an indicated 2800-2900 kW. The generator voltage and frequency shall be 4160 ± 420 volts and 60 ± 1.2 Hz within 10 seconds after the start signal; the steady-state generator voltage and frequency shall be maintained within these limits during this test. Within 5 minutes after completing this 24-hour test, perform Surveillance Requirement 4.8.1.1.2.a.4).*
9. Verifying that the auto-connected loads to each diesel generator do not exceed the 2000-hour rating of 3100 kW.
10. Verifying the diesel generator's capability to:
 - a) Synchronize with the offsite power source while the generator is loaded with its emergency loads upon a simulated restoration of offsite power,
 - b) Transfer its loads to the offsite power source, and
 - c) Be restored to its standby status.
11. Verifying that the automatic load sequence timer is OPERABLE with the interval between each load block within $\pm 10\%$ of its design interval.
12. Verifying that the following diesel generator lockout features prevent diesel generator starting only when required:
 - a) 4160-volt ESF bus lockout.
 - b) Differential trip.
 - c) Shutdown relay trip.

*If Surveillance Requirement 4.8.1.1.2.a.4) is not satisfactorily completed, it is not necessary to repeat the preceding 24-hour test. Instead, the diesel generator may be operated at an indicated 2500-2600 kW for 2 hours or until operating temperature has stabilized.