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. 128
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 January 28, 1998, as supplemented March 10, 1998, 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. 128 , 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 90 days.

FOR THE NUCLEAR REGULATORY COMMISSION

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Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: September 16, 1998

ATTACHMENT TO LICENSE AMENDMENT NO. 128

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
xxi	xxi
3/4 3-61a	3/4 3-61a
3/4 3-63a	3/4 3-63a
3/4 4-6	3/4 4-6
3/4 4-6a	3/4 4-6a
3/4 4-30	3/4 4-30
3/4 4-31	3/4 4-31
B 3/4 4-1a	B 3/4 4-1a
B 3/4 4-8	B 3/4 4-8
B 3/4 4-9	B 3/4 4-9

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. Deleted				
15. Deleted				
16. Primary Containment Isolation Valve Position	1/valve	1/valve	1, 2, 3	82

#Also included in the OFFSITE DOSE CALCULATION MANUAL.

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. Deleted			
15. Deleted			
16. Primary Containment Isolation Valve Position	M	R	1, 2, 3

REACTOR COOLANT SYSTEM

IDLE RECIRCULATION LOOP STARTUP

LIMITING CONDITION FOR OPERATION

3.4.1.4 An idle recirculation loop shall not be started unless the temperature differential between the reactor pressure vessel steam space coolant and the bottom head drain line coolant is less than or equal to 145°F, and:

a. When both loops have been idle, unless the temperature differential between the reactor coolant within the idle loop to be started up and the coolant in the reactor pressure vessel is less than or equal to 50°F, or

b. When only one loop has been idle, unless the temperature differential between the reactor coolant within the idle and operating recirculation loops is less than or equal to 50°F.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, 3 and 4.

ACTION:

With temperature differences exceeding the above limits, suspend startup of any idle recirculation loop.

SURVEILLANCE REQUIREMENTS

4.4.1.4 The temperature differentials shall be determined to be within the limits within 15 minutes prior to startup of an idle recirculation loop.

FIGURE 3.4.1.4-1 - DELETED

3/4.4.10 CORE THERMAL HYDRAULIC STABILITY

LIMITING CONDITION FOR OPERATION

3.4.10 The Reactor core shall not exhibit core thermal hydraulic instability or be operated in the Scram or Exit Regions as specified in Figure 3.4.10-1.

APPLICABILITY: OPERATIONAL CONDITION 1

ACTION:

a. With the Reactor operating in the Scram Region as specified in Figure 3.4.10-1, immediately place the Reactor Mode Switch in the Shutdown position.

b. With the Reactor operating in the Exit Region as specified in Figure 3.4.10-1, immediately initiate action to leave the Exit Region by inserting control rods or by increasing core flow.*

c. If core thermal hydraulic instability occurs as evidenced by a sustained increase in APRM or LPRM peak-to-peak noise level reaching 2 or more times its initial level, and occurring with a characteristic period of less than 3 seconds, immediately place the Reactor Mode Switch in the Shutdown position.

SURVEILLANCE REQUIREMENTS

4.4.10.1 The provisions of Specification 4.0.4 are not applicable.

4.4.10.2 When operating within the Stability Awareness Region as specified in Figure 3.4.10-1, verify that the reactor core is not exhibiting core thermal hydraulic instability by monitoring APRM and LPRM signals immediately and at least once every hour.

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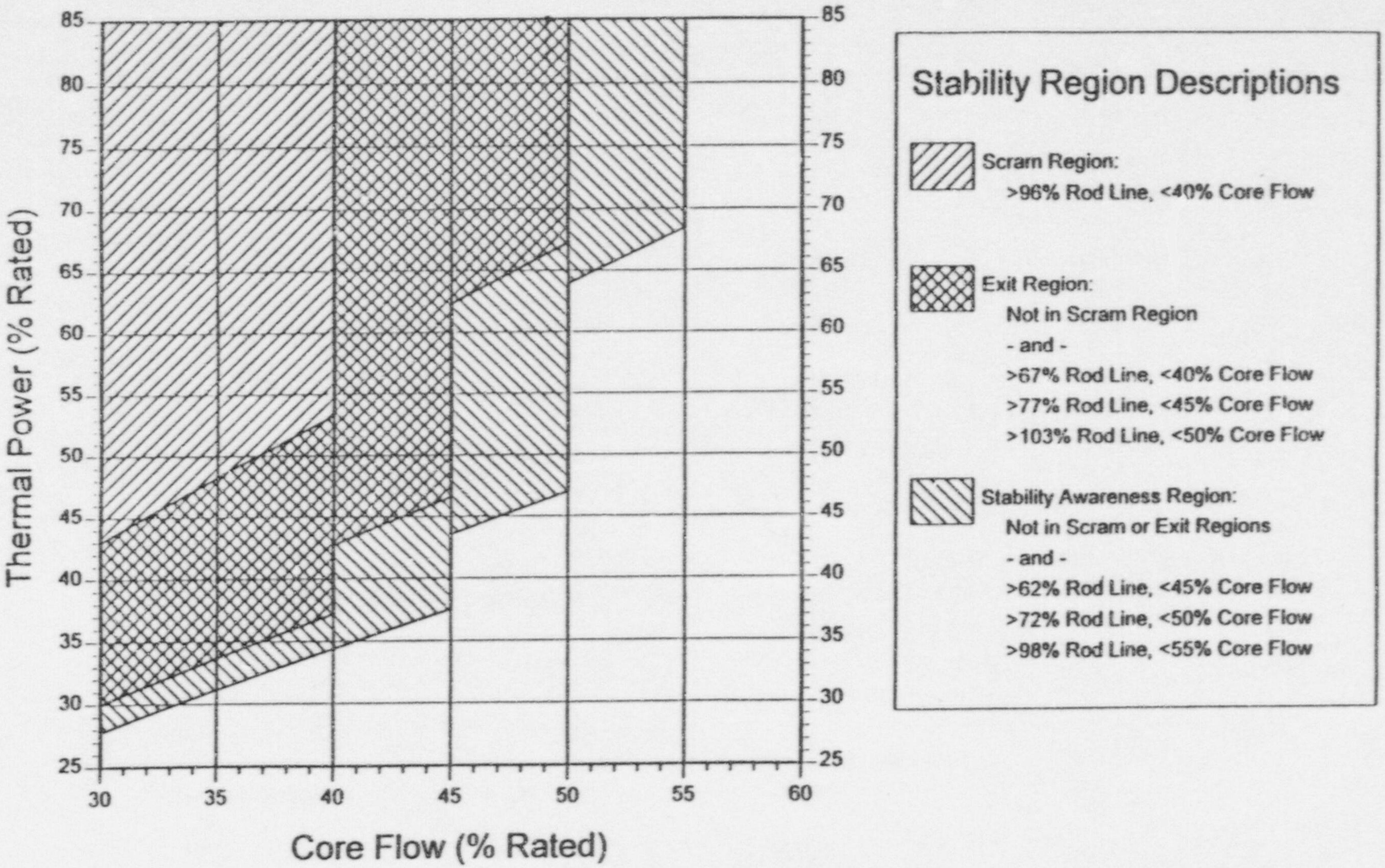
* Restarting an Idle Recirculation Loop or resetting a Recirculation Flow Limiter are not acceptable methods of immediately increasing core flow to leave the Exit Region.



THERMAL POWER VERSUS CORE FLOW

FIGURE 3.4.10-1

3/4.4.1 RECIRCULATION SYSTEM (Continued)

Sudden equalization of a temperature difference greater than 145°F between the reactor vessel bottom head coolant and the coolant in the upper region of the reactor vessel by increasing core flow rate would cause undue stress in the reactor vessel bottom head.

3/4.4.2 SAFETY/RELIEF VALVES

The safety valve function of the safety/relief valves operate to prevent the reactor coolant system from being pressurized above the Safety Limit of 1325 psig in accordance with the ASME Code. A total of 11 OPERABLE safety/relief valves is required to limit reactor pressure to within ASME III allowable values for the worst case upset transient.

Demonstration of the safety/relief valve lift settings will occur only during shutdown and will be performed in accordance with the provisions of Specification 4.0.5. Although the safety/relief valves are tested to demonstrate that opening pressures are within ±3% of the nominal pressure setpoints, they are adjusted to within ±1% of the nominal pressure setpoints prior to reinstallation.

The low-low set system ensures that a potentially high thrust load (designated as load case C.3.3) on the SRV discharge lines is eliminated during subsequent actuations. This is achieved by automatically lowering the closing setpoint of two valves and lowering the opening setpoint of two valves following the initial opening. Sufficient redundancy is provided for the low-low set system such that failure of any one valve to open or close at its reduced setpoint does not violate the design basis.

3/4.4.10 CORE THERMAL HYDRAULIC STABILITY

BWR cores typically operate with the presence of global flux noise in a stable mode which is due to random boiling and flow noise. As the power/flow conditions are changed, along with other system parameters (xenon concentration, subcooling, power distribution, etc.) the thermal hydraulic/reactor kinetic feedback mechanism can be enhanced such that random perturbations may result in sustained limit cycle or divergent oscillations in power and flow.

Two major modes of oscillations have been observed in BWRs. The first mode is the fundamental or core-wide oscillation mode in which the entire core oscillates in phase in a given axial plane. The second mode involves regional oscillation in which one half of the core oscillates 180 degrees out of phase with the other half. Studies have indicated that adequate margin to the Safety Limit Minimum Critical Power Ratio (SLMCPR) may not exist during oscillations.

Figure 3.4.10-1 specifies the Scram, Exit, and Stability Awareness Regions by providing a description of these region boundaries based on Rod Line, Core Flow and Thermal Power. The Scram and Exit Regions represent the least stable conditions of the plant (high power/low flow). The Scram and Exit Regions are usually entered as the result of a plant transient (for example, recirculation pump trips) and therefore are generally not considered part of the normal operating domain. Since all stability events (including test experience) have occurred in either the Scram or Exit Regions, these regions are avoided to minimize the possibility of encountering oscillations and potentially challenging the SLMCPR. Therefore, intentional operation in the Scram or Exit Regions is not allowed. It is recognized that during certain abnormal conditions within the plant, it may become necessary to enter the Scram or Exit Regions for the purpose of protecting equipment which, were it to fail, could impact plant safety or for the purpose of protecting a safety or fuel operating limit. In these cases, the appropriate actions for the region entered would be performed as required.

Most oscillations that have occurred during testing and operation have occurred at or above the 96% rod line with core flow near natural circulation. This behavior is consistent with analyses which predict reduced stability margin with increasing power or decreasing flow. As core flow is increased or power decreased, the probability of oscillations occurring will decrease. The Scram and Exit Regions bound the majority of the stability events and tests observed in GE BWRs. Since the Scram Region represents the least stable region of the power/flow operating domain, the potential to rapidly encounter large magnitude core thermal hydraulic oscillations is increased. During transients, the operator may not have sufficient time to leave the Scram region before oscillations develop and reach an unacceptable magnitude. Therefore, the prompt action of manually scramming the plant when the Scram Region is entered or when oscillations are detected is required to ensure protection of the SLMCPR.

3/4.4.10 CORE THERMAL HYDRAULIC STABILITY (Continued)

Based on test and operating experience, the frequency of core thermal hydraulic oscillations is less in the Exit Region than in the Scram Region. Core decay ratios are expected and predicted to be lower in this region since the Exit Region covers a lower power and higher flow range than the Scram Region. Also, the margin to the SLMCPR will typically be larger in the Exit Region than in the Scram Region. With more margin to SLMCPR and a lower probability of oscillations, leaving the Exit Region by immediate control rod insertion or core flow increase is justified. Restarting an Idle Recirculation Loop or resetting a Recirculation Flow Limiter are not acceptable methods of increasing core flow to leave the Exit Region because these actions would not support timely completion of this immediate action. If oscillations are observed at any time, the reactor will be manually scrammed.

The potential for core thermal hydraulic oscillations to occur outside of the Scram or Exit Regions is small, but could occur. Therefore, frequent monitoring of APRM and LPRM signals is appropriate when operating in the Stability Awareness Region.