

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20665-0001

DETROIT EDISON COMPANY

DOCKET NO. 50-341

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AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 126 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 March 27, 1998, as supplemented May 28 and July 31, 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.

 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. 126, 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.

 This license amendment is effective as of the date of its issuance with full implementation within 90 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Andrew J. Kugler, Project Manager

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 25, 1998

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
3/4 5-1	3/4 5-1
3/4 5-5	3/4 5-5*
3/4 5-6	3/4 5-6
B 3/4 5-1	B 3/4 5-1

^{*}Overleaf page provided to maintain document completeness. No changes contained on this page.

3/4.5 EMERGENCY CORE COOLING SYSTEMS

3/4.5.1 ECCS - OPERATING

LIMITING CONDITION FOR OPERATION

- 3.5.1 The emergency core cooling systems shall be OPERABLE with:
 - a. The core spray system (CSS) consisting of two subsystems with each subsystem comprised of:
 - 1. Two OPERABLE CSS pumps, and
 - An OPERABLE flow path capable of taking suction from the suppression chamber and transferring the water through the spray sparger to the reactor vessel.
 - b. The low pressure coolant injection (LPCI) system of the residual heat removal system consisting of two subsystems with each subsystem comprised of:
 - 1. Two OPERABLE LPCI (RHR) pumps, and
 - An OPERABLE flow path capable of taking suction from the suppression chamber and transferring the water to the reactor vessel.***
 - c. The high pressure cooling injection (HPCI) system consisting of:
 - One OPERABLE HPCI pump, and
 - An OPERABLE flow path capable of taking suction from the suppression chamber and transferring the water to the reactor vessel.
 - d. The automatic depressurization system (ADS) with at least five OPERABLE ADS valves.

APPLICABILITY: OPERATIONAL CONDITION 1, 2* ** # and 3* **.

**The ADS is not required to be OPERABLE when reactor steam dome pressure is less than or equal to 150 psig.

***Low pressure coolant injection (LPCI) subsystems may be considered OPERABLE during alignment and operation for decay heat removal with reactor steam dome pressure less than the Residual Heat Removal (RHR) cut-in permissive pressure in OPERATIONAL CONDITION 3, if capable of being manually realigned and not otherwise inoperable.

*See Special Test Exception 3.10.6.

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^{*}The HPCI system is not required to be OPERABLE when reactor steam dome pressure is less than or equal to 150 psig.

SURVEILLANCE REQUIREMENTS (Continued)

d. For the ADS:

- At least once per 31 days, performing a CHANNEL FUNCTIONAL TEST of the primary containment pneumatic supply system low pressure alarm system.
- 2. At least once per 18 months:
 - a) Performing a system functional test which includes simulated automatic actuation of the system throughout its emergency operating sequence, but excluding actual valve actuation.
 - b) Manually opening each ADS valve when the reactor steam dome pressure is greater than or equal to 150 psig* and observing that either:
 - The control valve or bypass valve position responds accordingly, or
 - There is a corresponding change in the measured steam flow.
 - c) Performing a CHANNEL CALIBRATION of the primary containment pneumatic supply system low pressure alarm system and verifying an alarm setpoint of 80 ± 5 psi on decreasing pressure.

^{*}The provisions of Specification 4.0.4 are not applicable provided the surveillance is performed within 12 hours after reactor steam pressure is adequate to perform the test.

EMERGENCY CORE COOLING SYSTEMS 3/4 5.2 ECCS - SHUTDOWN LIMITING CONDITION FOR OPERATION

- 3.5.2 At least two of the following subsystems shall be OPERABLE:
 - a. Core spray system (CSS) subsystems with a subsystem comprised of:
 - 1. At least two OPERABLE CSS pumps, and
 - An OPERABLE flow path capable of taking suction from at least one of the following water sources and transferring the water through the spray sparger to the reactor vessel:
 - a) From the suppression chamber, or
 - b) When the suppression chamber water level is less than the limit required in Specification 3.5.3 or is drained, from the condensate storage tank containing at least 150,000 available gallons of water, equivalent to a level of 18 feet.
 - b. Low pressure coolant injection (LPCI) system subsystems with a subsystem comprised of:
 - 1. At least two OPERABLE LPCI (RHR) pumps, and
 - An OPERABLE flow path capable of taking suction from the suppression chamber and transferring the water to the reactor vessel**.

APPLICABILITY: OPERATIONAL CONDITION 4 and 5*.

ACTION:

- a. With one of the above required subsystem(s) inoperable, restore at least two subsystem(s) to OPERABLE status within 4 hours or suspend all operations with a potential for draining the reactor vessel.
- b. With both of the above required subsystems inoperable, suspend CORE ALTERATIONS and all operations with a potential for draining the reactor vessel. Restore at least one subsystem to OPERABLE status within 4 hours or establish SECONDARY CONTAINMENT INTEGRITY within the next 8 hours.

^{*}The ECCS is not required to be OPERABLE provided that the reactor vessel head is removed, the cavity is flooded, the spent fuel pool gates are removed, and water level is maintained within the limits of Specification 3.9.8 and 3.9.9.

^{**}LPCI subsystem(s) may be considered OPERABLE during alignment and operation for decay heat removal if capable of being manually realigned and not otherwise inoperable.

3/4.5.1 and 3/4.5.2 ECCS - OPERATING and SHUTDOWN

The core spray system (CSS), together with the LPCI mode of the RHR system, is provided to assure that the core is adequately cooled following a loss-of-coolant accident and provides adequate core cooling capacity for all break sizes up to and including the double-ended reactor recirculation line break, and for smaller breaks following depressurization by the ADS.

The CSS is a primary source of emergency core cooling after the reactor vessel is depressurized and a source for flooding of the core in case of accidental draining.

The surveillance requirements provide adequate assurance that the CSS will be OPERABLE when required. Although all active components are testable and full flow can be demonstrated by recirculation through a test loop during reactor operation, a complete functional test requires reactor shutdown. The pump discharge piping is maintained full to prevent water hammer damage to piping and to start cooling at the earliest moment.

LPCI subsystems may be considered OPERABLE during alignment and operation for decay heat removal when below the actual RHR cut in permissive pressure in OPERATIONAL CONDITIONS 3, 4, and 5, if capable of being manually realigned (remote) to the LPCI mode and not otherwise inoperable. At these low pressures and decay heat levels, a reduced complement of ECCS subsystems should provide the required core cooling, thereby allowing operation of RHR shutdown cooling when necessary.

The low pressure coolant injection (LPCI) mode of the RHR system is provided to assure that the core is adequately cooled following a loss-of-coolant accident. Two subsystems, each with two pumps, provide adequate core flooding for all break sizes up to and including the double-ended reactor recirculation line break, and for small breaks following depressurization by the ADS.

The surveillance requirements provide adequate assurance that the LPCI system will be OPERABLE when required. Although all active components are testable and full flow can be demonstrated by recirculation through a test loop during reactor operation, a complete functional test requires reactor shutdown. The pump discharge piping is maintained full to prevent water hammer damage to piping and to start cooling at the earliest moment.

The high pressure coolant injection (HPCI) system is provided to assure that the reactor core is adequately cooled to limit fuel clad temperature in the event of a small break in the reactor coolant system and loss of coolant which does not result in rapid depressurization of the reactor vessel. The HPCI system permits the reactor to be shut down while maintaining sufficient reactor vessel water level inventory until the vessel is depressurized. The HPCI system continues to operate until reactor vessel pressure is below the pressure at which CSS system operation or LPCI mode of the RHR system operation maintains core cooling.