



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. 81  
License No. NPF-43

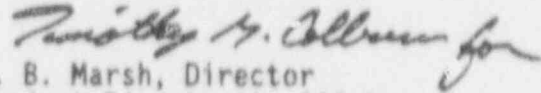
1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by the Detroit Edison Company (the licensee) dated September 11, 1990, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules 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. 81, 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, with full implementation within 30 days.

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: April 22, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 81

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.

REMOVE

3/4 7-8

----

3/4 7-9

3/4 7-10

INSERT

3/4 7-8

3/4 7-8a

3/4 7-9

3/4 7-10

PLANT SYSTEMS

3/4.7.2 CONTROL ROOM EMERGENCY FILTRATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.2 The control room emergency filtration system shall be OPERABLE with the system composed of:

- a. Two OPERABLE redundant subsystems, each consisting of:
  1. An emergency makeup inlet air heater
  2. An emergency recirculation fan
  3. A return fan
  4. A supply fan
  5. A chiller unit
  6. Dampers required to support system operation
- b. An OPERABLE flow path capable of:
  1. Recirculating control room air through the emergency recirculation air filter train.
  2. Supplying emergency makeup air from the north and south emergency intakes to the control room through the emergency makeup air filter train.\*\*

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, 3, 4, 5, and \*

ACTION:

- a. With the control room air temperature greater than 95°F but less than 105°F, restore the control room air temperature to less than or equal to 95°F within 12 hours or go to a 4 hour operating shift. With the control room air temperature greater than or equal to 105°F, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. In OPERATIONAL CONDITION 1, 2, or 3:
  1. With the above required flow path and/or both required redundant subsystems inoperable, be in at least HOT SHUTDOWN within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.#
  2. With one of the above required redundant subsystems inoperable, restore the inoperable subsystem to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

\*When irradiated fuel is being handled in the secondary containment.

\*\*Not applicable in the chlorine mode of operation.

#This ACTION may be delayed for 6 hours to perform Surveillance Requirement 4.7.2.c due to painting, fire, or chemical release in any ventilation zone communicating with the system or to perform Surveillance Requirement 4.7.2.d.

PLANT SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

---

ACTION (Continued)

- c. In OPERATIONAL CONDITION 4, 5 or \*:
  - 1. With one of the required redundant subsystems inoperable, restore the inoperable component(s) to OPERABLE status within 7 days. Otherwise, either:
    - (a) Initiate and maintain operation of the control room emergency filtration system in the recirculation mode of operation, or
    - (b) Declare the control room emergency filtration system inoperable.
  - 2. With the control room emergency filtration system inoperable, suspend CORE ALTERATIONS, handling of irradiated fuel in the secondary containment and operations with a potential for draining the reactor vessel.
- d. The provisions of Specification 3.0.3 are not applicable in Operational Condition \*.

---

\*When irradiated fuel is being handled in the secondary containment.

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS

---

4.7.2 The control room emergency filtration system shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to 95°F.
- b. At least once per 31 days by:
  1. Initiating fan operation from the control room with each subsystem, establishing flow for at least 15 minutes through the HEPA filters and charcoal adsorbers.
  2. Verifying flow through the HEPA filters and charcoal adsorbers for at least 10 hours with the associated emergency makeup inlet air heater OPERABLE. The subsystem used to establish the 10 hours of flow through the HEPA filters and charcoal adsorbers shall be staggered such that each subsystem is utilized at least once per 62 days.
- c. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire, or chemical release in any ventilation zone communicating with the system by:
  1. Verifying that the system satisfies the in-place penetration testing acceptance criteria of less than 1.0% and uses the test procedure guidance in Regulatory Positions C.5.a, C.5.c, and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, while operating the system at a flow rate of 1800 cfm  $\pm$  10% through the makeup filter and 3000 cfm  $\pm$  10% through the recirculation filter.
  2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978, for a methyl iodide penetration of less than 1.0%; and
  3. Verifying a system flow rate of 3000 cfm  $\pm$  10% during system operation when tested in accordance with ANSI N510-1980.
- d. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978, for a methyl iodide penetration of less than 1.0%.

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

- e. At least once per 18 months by:
1. Verifying that the pressure drop across the recirculation train and across the makeup train combined HEPA filters and charcoal adsorber banks is less than 8 inches and 6 inches water gauge respectively while operating the system at a flow rate of 3000 cfm  $\pm$  10% through the recirculation filter train and 1800 cfm  $\pm$  10% through the makeup filter train.
  2. Verifying that the system will automatically switch to the recirculation mode of operation on each of the below actuation test signals and verifying that on any one of the below recirculation mode actuation test signals, the system automatically switches to the recirculation mode of operation, the isolation valves close within 5 seconds and the control room is maintained at a positive pressure of at least 0.125 inch water gauge relative to the outside atmosphere during system operation at a flow rate less than or equal to 1800 cfm through the emergency makeup air filter:
    - a) Control center inlet radiation monitor.
    - b) Fuel pool ventilation exhaust radiation monitor.
    - c) Low reactor water level.
    - d) High drywell pressure.
  3. Verifying that on the chlorine mode actuation signal, the system automatically switches to the chlorine mode of operation, the isolation valves close within 4 seconds, and a minimum of 1200 cfm emergency recirculation is established.
  4. Verifying that each of the emergency makeup inlet air heaters dissipate 12.0  $\pm$  2.0 kW when tested in accordance with ANSI N510-1980.
- f. After each complete or partial replacement of a train HEPA filter bank by verifying that the train HEPA filter bank satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1.0% in accordance with ANSI N510-1980 while operating the system at a flow rate of 1800 cfm  $\pm$  10% for the makeup train and 3000 cfm  $\pm$  10% for the recirculation train.
- g. After each complete or partial replacement of a train charcoal adsorber bank by verifying that the train charcoal adsorber bank satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1.0% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of 1800 cfm  $\pm$  10% for the makeup train and 3000 cfm  $\pm$  10% for the recirculation train.