

# UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

### METROPOLITAN EDISON COMPANY

# JERSEY CENTRAL POWER AND LIGHT COMPANY

### PENNSYLVANIA ELECTRIC COMPANY

#### GPU NUCLEAR CORPORATION

DOCKET NO. 50-289

### THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 1

# AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 97 License No. DPR-50

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by GPU Nuclear Corporation, et al (the licensees) dated February 9, 1984, 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, Facility Operating License No. DPR-50 is hereby amended as indicated below and by changes to the Technical Specifications as indicated in the attachment to this license amendment.

Revise paragraph 2.c.(2) to read as follows:

# Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No.97, are hereby incorporated in the license. The GPU Nuclear Corporation shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Operating Reactors Branch #4

Division of Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: June 21, 1984

# ATTACHMENT TO LICENSE AMENDMENT NO. 97

# FACILITY OPERATING LICENSE NO. DPR-50

## DOCKET NO. 50-289

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the areas of change.

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### 3.1.13 Reactor Coolant System Vents

### Applicability

Provides the limiting conditions for operation of the Reactor Coolant System Vents. These limiting conditions for operation (LCO) are applicable only when Reactor is critical.

### Objective

To ensure that sufficient vent flow paths are operable during the plant operating modes mentioned above.

### Specification

- 3.1.13.1 At least one reactor coolant system vent path consisting of at least two power operated valves in series, powered from emergency buses shall be OPERABLE and closed at each of the following locations:
  - a. Reactor vessel head\* (RC-V42 & RC-V43)
  - b. Pressurizer steam space (RC-V28 & RC-V44)
  - c. Reactor coolant system high point (either RC-V4OA and 41A) or (RC-V4OB and 41B)

### Action

- 3.1.13.2 a. With one of the above reactor coolant system vent paths inoperable, the inoperable vent path shall be maintained closed, with power removed from the valve actuators in the inoperable vent path. The inoperable vent path shall be restored to OPERABLE status within 30 days, or the plant shall be in HOT SHUTDOWN within an additional 6 hours and in COLD SHUTDOWN within the following 30 hours.
  - b. With two or more of the above reactor coolant system vent paths inoperable, maintain the inoperable vent path closed, with power removed from the valve actuators in the inoperable vent paths, and restore at least two of the vent paths to OPERABLE status within 72 hours or be in HOT SHUTDOWN within an additional 6 hours and in COLD SHUTDOWN within the following 30 hours.
  - \* This specification becomes binding after installation and initially being declared operable.

#### Bases

The safety function enhanced by this venting capability is core cooling. For events beyond the present design basis, this venting capability will substantially increase the plants ability to deal with large quantities of noncondensible gas which could interfere with natural circulation (i.e., core cooling).

The reactor vessel head vent (RC-V42 & RC-V43 in series) provides the capability of venting noncondensible gases from the majority of the reactor vessel head as well as the Reactor Coolant hot legs (to the elevation of the top of the outlet nozzles) and cold legs (through vessel internals leakage paths, to the elevation of the top of the inlet nozzles). This vent is routed to containment atmosphere.

Venting for the pressurizer steam space (RC-V28 and RC-V44 in series) has been provided to assure that the pressurizer is available for Reactor Coolant System pressure and volume control. This vent is routed to the Reactor Coolant Drain Tank.

Additional venting capability has been provided for the Reactor Coolant hot leg high points (RC-V4CA,B, RC-V4LA,B), which normally cannot be vented through the Reactor vessel head vent or pressurizer steam-space vent. These vents relieve to containment atmosphere through a rupture disk (set at low pressure).

The above vent systems are seismically designed, environmentally qualified and the power operated valves (2 in series in each flow path) which are powered from emergency buses fail closed on loss of power. All vent valves for the reactor vessel head vent, pressurizer vent and loop B high point vent are powered from the class lE "B" bus. The vent valves for the loop A high point vent are powered from the class lE "A" bus. The power operated valves are controlled in the Control Room. The individual vent path lines are sized so that an inadvertant valve opening will not constitute a LOCA as defined in 10 CFR 50.46(c)(1). These design features provide a high degree of assurance that these vent paths will be available when needed, and that inadvertent operation or failures will not significantly hamper the safe operation of the plant.

4.11 REACTOR COOLANT SYSTEM VENTS

# Applicability

Applies to Reactor Coolant System Vents.

# Objective

To ensure that Reactor Coolant System vents are able to perform their design function.

# Specification

4.11.1 Each reactor coolant system vent path shall be demonstrated OPERABLE once per refueling interval by cycling each power operated valve in the vent path through at least one complete cycle of full travel from the control room during COLD SHUTDOWN or REFUELING.

### BASES

Frequency of tests specified above are necessary to ensure that the individual Reactor Coolant System Vents will perform their functions. It is not advisable to perform these tests during Plant Power Operation, or when there is significant pressure in the Reactor Coolant System. Tests are, therefore, to be performed during either Cold Shutdown or Refugling.