

METROPOLITAN EDISON COMPANY
JERSEY CENTRAL POWER & LIGHT COMPANY

AND

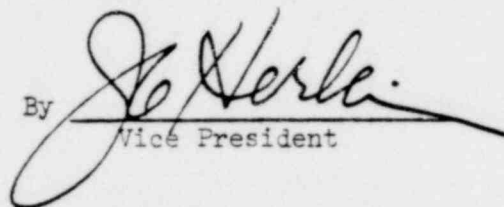
PENNSYLVANIA ELECTRIC COMPANY
THREE MILE ISLAND NUCLEAR STATION UNIT 1

Operating License No. DPR-50
Docket No. 50-289
Technical Specification Change Request No. 74

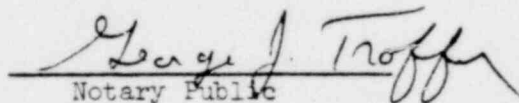
This Technical Specification Change Request is submitted in support of Licensee's request to change Appendix A to Operating License No. DPR-50 for Three Mile Island Nuclear Station Unit 1. As a part of this request, proposed replacement pages for Appendix A are also included.

METROPOLITAN EDISON COMPANY

By


Vice President

Sworn and subscribed to me this 13th day of March, 1978.


Notary Public

GEORGE J. TROFFER
Notary Public, Reading, Berks Co.
My Commission Expires Jan. 25, 1982

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF

DOCKET NO. 50-289
LICENSE NO. DPR-50

METROPOLITAN EDISON COMPANY

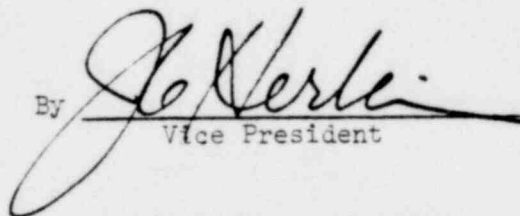
This is to certify that a copy of Technical Specification Change Request No. 74 to Appendix A of the Operating License for Three Mile Island Nuclear Station Unit 1, has, on the date given below, been filed with the U. S. Nuclear Regulatory Commission and been served on the chief executives of Londonderry Township, Dauphin County, Pennsylvania and Dauphin County, Pennsylvania by deposit in the United States mail, addressed as follows:

Mr. Weldon B. Arehart
Board of Supervisors of
Londonderry Township
R. D. #1, Geyers Church Road
Middletown, Pennsylvania 17057

Mr. Harry B. Reese, Jr.
Board of County Commissioners
of Dauphin County
Dauphin County Court House
Harrisburg, Pennsylvania 17120

METROPOLITAN EDISON COMPANY

By


Vice President

Dated: March 13, 1978

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Three Mile Island Nuclear Station, Unit 1
Operating License No. DPR-50
Docket No. 50-289

Technical Specification Change Request No. 74

The licensee requests that the attached changed page replace page 4-41 of the existing Technical Specifications, and that the attached page 3-18c be added to the existing Technical Specifications.

Reasons for Change Request

This change was requested by the Commission in their letter of November 11, 1977. The Commission requires specifications identifying the RC overpressurization system enabling temperature and the power operated relief valve (PORV) setpoint, and specifications relating to system testing and maintenance.

Safety Analysis Justifying Change

This change increases the specifications required to be followed to take the electromatic relief valve (ERV), out of service, states the settings for the ERV, and defines operating restrictions for the HPI valves and the pressurizer level. (i) Therefore, the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased; (ii) the possibility of an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created; (iii) the margin of safety defined in the basis for any technical specification is not reduced.

4.5.2 EMERGENCY CORE COOLING SYSTEM

Applicability

Applies to periodic testing requirement for emergency core cooling systems.

Objective

To verify that the emergency core cooling systems are operable.

Specifics on

POOR ORIGINAL

4.5.2.1 High Pressure Injection

- a. During each refueling interval and following maintenance or modification that affects system flow characteristics, system pumps and system high point vents shall be vented, and a system test shall be conducted to demonstrate that the system is operable. 61A

- b. After a satisfactory test of the emergency loading sequence (4.5.1), the M. U. Pump and its required supporting auxiliaries will be started manually by the operator and a test signal will be applied to the high pressure injection valves MU-V16A, B, C, D to demonstrate actuation of the high pressure injection system for emergency core cooling operation. 61A

The test will be considered satisfactory if the valves have completed their travel and the M. U. pumps are running as evidenced by the control board component operating lights. Minimum acceptable flow must be greater than or equal to 200 gpm per injection leg and greater than or equal to 500 gpm per HPI pump. 61A

- c. The correct limit switch setting of MU-V16A, B, C, D will be verified within four hours of any maintenance on the valve or operator that affects the limit switch setting, when the High Pressure Injection System is required to be operable.
- d. Testing which requires HPI flow thru MU-V16A/B/C/D shall be conducted only under either of the following conditions:
- 1) T avg. shall be greater than 320°F.
 - 2) Head of the Reactor Vessel shall be removed.

4.5.2.2 Low Pressure Injection

- a. During each refueling period and following maintenance or modification that affects system flow characteristics, system pumps and high point vents shall be vented, and a system test shall be conducted to demonstrate that the system is operable. The auxiliaries required for low pressure injection are all included in the emergency loading sequence specified in 4.5.1.
- b. The test will be considered satisfactory if the decay heat pumps listed in 4.1.5.1b have been successfully started and the decay heat injection valves and the decay heat supply valves have completed their travel as evidenced by the control board component operating lights. Minimum acceptable flow must be greater than or equal to 2700 gpm per injection leg/LPI pump. 61A

Applicability

Applies to the settings, and conditions for isolation of the electromatic relief valve.

Objective

To prevent the possibility of inadvertently over pressurizing the primary loop.

Specification

3.1.12.1 The electromatic relief valve shall not be taken out of service, nor shall it be isolated from the system (except that the electromatic relief valve may be isolated to limit leakage to within the limits of specification 3.1.6.), unless one of the following is in effect:

- a. High Pressure Injection Pump breakers are racked out or MU-V16A/B/C/D are closed.
- b. Head of the Reactor Vessel is removed.
- c. T avg. is above 320°F.

3.1.12.2 The electromatic relief valve settings shall be as follows, within the tolerances listed in the bases of specification 3.1.2:

Above 275°F - 2255 psig
Below 275°F - 485 psig

3.1.12.3 If the reactor vessel head is installed and T avg. is $\leq 275^{\circ}\text{F}$, High Pressure Injection Pump breakers shall not be racked in unless:

- a. MU-V16 A/B/C/D are closed, and
- b. Pressurizer level is ≤ 220 inches.

Bases

If the electromatic relief valve is removed from service, sufficient measures are incorporated to prevent overpressurization by either eliminating the high pressure sources or flowpaths or assuring that the RCS is open to atmosphere. In order to prevent exceeding leakage rates specified in T.S. 3.1.6. the electromatic relief valve may be isolated.

The electromatic relief valve setpoints are specified with tolerances assumed in the bases for Technical Specification 3.1.2.

With RCS temperatures less than 275°F and the makeup pumps running, the high pressure injection valves are closed and the pressurizer level is maintained less than 220 inches to prevent overpressurization in the event of any single failure.