

Regulatory Docket File

Received w/ Ltr Dated 11-3-75

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. 24

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 *Richard L. Ruth*
Vice President-Generation

Sworn and subscribed to me this 3rd day of November, 1975

Richard L. Ruth
Notary Public

RICHARD L. RUTH
Notary Public, Middletown Twp., Berks Co.
My Commission Expires September 23, 1978

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METROPOLITAN EDISON COMPANY SUBSIDIARY OF GENERAL PUBLIC UTILITIES CORPORATION

POST OFFICE BOX 542 READING, PENNSYLVANIA 19603

TELEPHONE 215 - 929-3601

November 3, 1975
GQL 1672

[Faint, illegible text]

Mr. Charles P. Hoy, Chairman
Board of County Commissioners
of Dauphin County
P.O. Box 1295
Harrisburg, Pennsylvania 17120

11-3-75

Dear Mr. Hoy:

Enclosed please find one copy of Technical Specification Change Request No. 24 to Appendix A of the Operating License for Three Mile Island Nuclear Station Unit 1.

This request was filed with the U.S. Nuclear Regulatory Commission on November 3, 1975.

Very truly yours,

/s/ R. C. Arnold

R. C. Arnold
Vice President

RCA:CWS:rk

File 20.1.1/7.7.4.3.6.1

1487 131



METROPOLITAN EDISON COMPANY SUBSIDIARY OF GENERAL PUBLIC UTILITIES CORPORATION

POST OFFICE BOX 542 READING, PENNSYLVANIA 19603

TELEPHONE 215 - 929-3601

November 3, 1975
GQL 1672

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

Dear Mr. Arehart:

Enclosed please find one copy of Technical Specification Change Request
No. 24 to Appendix A of the Operating License for Three Mile Island
Nuclear Station Unit 1.

This request was filed with the U.S. Nuclear Regulatory Commission
on November 3, 1975.

Very truly yours,

/s/ R. C. Arnold

R. C. Arnold
Vice President

RCA:CWS:rk

File 20.1.1/7.7.4.3.6.1

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

11-3-75

Technical Specification Change Request No. 24

The licensee requests that the attached changed pages replace pages 5-8 and 5-9 of existing Technical Specifications.

Reason for Proposed Change

As indicated in our Nonroutine 30-Day Report 75-05, it was discovered that the UV detectors installed in the Air Intake Tunnel Fire Protection System were not the detectors specified in the FSAR. This change is necessary in order to correct the Technical Specifications to a bases consistent with the presently installed UV detectors. Also, this opportunity is being utilized to clarify certain statements made on pages 5-8 and 5-9 of Technical Specifications. No change or substitution of existing equipment is being made but only correct statements regarding their operation are being included. These refer to the last sentence on page 5-8 of existing Technical Specifications and brief descriptions on page 5-9 regarding function and operation of pressure detectors, temperature detectors and smoke detectors.

Safety Analysis Justifying Change

Nonroutine 30-Day Report 75-05 gives a comparison of the installed and specified UV detectors and shows that the installed detectors are satisfactory in all respects from a safety stand point and meet the original design criteria for this application. Therefore, there is no unreviewed safety question and no undue risk to the health and safety of the public.

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5.5 AIR INTAKE TUNNEL FIRE PROTECTION SYSTEMS

Applicability

Applies to the fire protection systems protecting the air intake tunnel.

Objective

To provide fire protection systems to prevent fire or explosive hydrocarbon vapors entering the control building through the air intake tunnel.

Specification

- 5.5.1 An accelerometer is attached to the air intake structure to detect its displacement.
- 5.5.2 Photocells (ultraviolet detectors) and Explosion Pressure detectors (static) are provided throughout the three air tunnel zones to indicate alarms in the control room, stop fans and close dampers at the air tunnel entrance to the control building, and actuate the Halon system in the affected zone or zones of the air intake tunnel. On the operation of any Halon system, all three water deluge systems are automatically operated.
- 5.5.3 Temperature detectors (rate compensating actuated) are provided throughout the three zones of the air intake tunnel to indicate alarms in the control room, stop fans and close dampers at the air tunnel entrance to the control building, actuate the water deluge system in each of the three zones of the air intake tunnel.
- 5.5.4 Smoke and Combustible Vapor detectors are provided to indicate alarms in the control room, stop fans, and close dampers.
- 5.5.5 Remote manual actuation stations are provided in the control room to stop fans, and close dampers at the air tunnel entrance to the control building and to actuate individual water deluge systems.

Basics

All fire protection systems are designed to extinguish or suppress an explosion from a vapor-air mixture.

Halon system discharge extinguisher electrical data: minimum firing current 1.0 amp, recommended firing current 5.0 amp. Operation: hydrostatic pressure is created by the explosive actuator rupturing the burst disc along pre-scored lines. Effective agent discharge is completed within 600 milliseconds.

Water deluge systems are designed to give a 0.3 gpm/sq. ft. discharge throughout the air intake tunnel. The thermal detectors operate when the specified temperature ($190^{\circ}\text{F} \pm 10^{\circ}\text{F}$) is reached or exceeded; and whenever the surrounding air temperature reaches the temperature above which a fire condition is considered to exist under all conditions of rates of rise as specified by Underwriters Laboratories Test. (Rate compensation)

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Photocell detectors - Operation: Normally open gate circuit closes when ultraviolet radiation from a flame or arc is present within the detector cone of vision. Performance: The detector arrangement with regard to sensitivity, Spectral response, and cone of vision shall be compatible with the application, in that, the response times will be sufficiently rapid to permit suppression and or inerting of the deflagration, as applicable. Explosive Pressure Detectors - Operation: Normally open contact closes when the static pressure setting is exceeded. Range: 0-5 psi; field adjustable.

Temperature detectors: Operation - The detectors operate when their temperature reaches or exceeds $190^{\circ}\text{F} \pm 10^{\circ}\text{F}$; and whenever the surrounding air temperature reaches a temperature above which a fire condition is considered to exist under all conditions of rates of rise as specified by Underwriters Laboratories Tests. Vapor detectors: Operation - Ionization type which functions when surrounding air reaches the alarm set point.

Smoke Detectors: Ionization type which will respond to an alarm condition when products of combustion are generated by a deflagration in the tunnel.

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11-3-75

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF

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

METROPOLITAN EDISON COMPANY

This is to certify that a copy of Technical Specification Change Request No. 24 to Appendix A of the Operating License for Three Mile Island Nuclear Station, Unit 1, dated November 3, 1975, and filed with the U. S. Nuclear Regulatory Commission November 3, 1975, has this 3rd day November, 1975, been served on the chief executives of Londonderry Township, Dauphin County, Pennsylvania, and of Dauphin County, Pennsylvania, by deposit in the United States Mail, addressed as follows:

Mr. Weldon B. Arehart, Chairman
Board of Supervisors of
Londonderry Township
R.D.#1, Geyers Church Road
Middletown, Pennsylvania 17957

Mr. Charles P. Hoy, Chairman
Board of County Commissioners of
Dauphin County
Dauphin County Courthouse
Harrisburg, Pennsylvania 17120

METROPOLITAN EDISON COMPANY

By Robert R. Arnold
Vice President-Generation

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