

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 7 TO FACILITY OPERATING LICENSE NO. DPR-50  
(CHANGE NO. 7 TO THE TECHNICAL SPECIFICATIONS)

METROPOLITAN EDISON COMPANY

THREE MILE ISLAND NUCLEAR STATION, UNIT 1

Introduction

On April 16, 1975, Metropolitan Edison Company (MetEd) made application to amend the operating license for Three Mile Island Unit 1. The proposed amendment changes Technical Specifications 3.1.3.5 and 3.5.2.5 which provide for revised control rod withdrawal limits. These revised limits are required to assure that the maximum, hypothetical, ejected control rod reactivity worth will not exceed the values contained in Technical Specification 3.5.2.3; these values of rod worth are 0.65%  $\Delta K/K$  and 1.00%  $\Delta K/K$  for conditions of full power and hot zero power, respectively.

Discussion

By letter dated March 31, 1975, the Nuclear Regulatory Commission (NRC) informed MetEd that deficiencies had been identified in the ejected rod worth calculation on which the control rod withdrawal limits for Three Mile Island Unit 1 had been based. This letter further stated that following control rod interchange\*, potential ejected control rods might exist which would violate the limits specified in Technical Specification 3.5.2.3.

On April 9, 1975, MetEd submitted a Nonroutine 30 Day Report 74-04 which confirmed the existence of a deficiency in the control rod withdrawal limits.

Evaluation

MetEd has provided additional information via a letter dated May 29, 1975, in response to our request dated May 7, 1975. MetEd indicated that their proposed changes in Technical Specifications provide control rod withdrawal

\*Control rod interchange is a process by which the control rods are re-sequenced for operation during the latter part of the fuel cycle.



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limits which assure that the ejected control rod worth limits, as specified in Technical Specification 3.5.2.3, will not be violated. Moreover, by adoption of the revised control rod withdrawal limits, additional shutdown margin is provided in the event of the hypothetical ejected control rod accident.

With regard to that portion of the revised control rod withdrawal limit curves in which ECCS considerations are limiting, above 82.5% of rated full power, the restrictions provided are at least as conservative as those presently provided for Three Mile Island Unit 1. Therefore, no reduction in operating margin relative to the ECCS limits will result upon adoption of the revised control rod withdrawal limits.

#### Conclusion

We have concluded, based on the considerations discussed above, that:

- (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and
- (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: JUN 6 1975

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UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-289

METROPOLITAN EDISON COMPANY  
JERSEY CENTRAL POWER AND LIGHT COMPANY  
PENNSYLVANIA ELECTRIC COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY

OPERATING LICENSE

Notice is hereby given that the U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 7 to Facility Operating License No. DPR-50 issued to Metropolitan Edison Company, Jersey Central Power and Light Company and Pennsylvania Electric Company which revised Technical Specifications for operation of the Three Mile Island Nuclear Station, Unit 1, located in Dauphin County, Pennsylvania. The amendment is effective as of its date of issuance.

The amendment modifies the Technical Specifications to incorporate revised Rod Withdrawal Limit Curves that decrease the worth (calculated neutron absorbing capability) of the worst hypothetical ejected control rod.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Notice of Proposed Issuance of Amendment to Facility Operating License in connection with this action was published in the FEDERAL REGISTER on May 5, 1973 (40 F.R. 19546). No request for a hearing or petition for leave to intervene was filed following notice of the proposed action.

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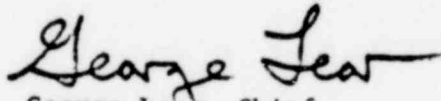
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For further details with respect to this action, see (1) the application for amendment dated April 16, 1975, and supplement dated May 29, 1975, (2) Amendment No. 7 to License No. DPR-50, with Change No. 7 and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. and at the Government Publications Section, State Library of Pennsylvania, Box 1601 (Education Building), Harrisburg, Pennsylvania.

A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Reactor Licensing.

Dated at Bethesda, Maryland, this 6th day of June, 1975.

FOR THE NUCLEAR REGULATORY COMMISSION



George Lear, Chief  
Operating Reactors Branch No. 3  
Division of Reactor Licensing

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