



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 19 TO FACILITY OPERATING LICENSE NO. DPR-50

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

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 1

DOCKET NO. 50-289

Introduction

By letter dated July 12, 1976, Metropolitan Edison Company (MetEd) requested a change in the Technical Specifications of License No. DPR-50 for the Three Mile Island Nuclear Station, Unit No. 1 (TMI-1). The proposed changes would require positive blocking of electrical power to the Core Flood Tank vent valves except under specified conditions and would require periodic venting of the pumps and lines associated with the Low Pressure Injection and High Pressure Injection Systems.

Discussion

By letter dated January 13, 1976, MetEd requested a change in the Technical Specifications for TMI-1 to permit operation as reloaded for the Cycle 2 fuel loading. In performing our review of this application, including review of the loss-of-coolant-accident (LOCA) analysis performed in accordance with Appendix K to 10 CFR 50, we identified in our Safety Evaluation, dated May 18, 1976, two conditions that could reduce the effectiveness of the Emergency Core Cooling System (ECCS). One of these conditions was the potential for spurious operation of the motor-operated vent valves, CF-V3A and CF-V3B, serving the core flooding tank (CFT) with an attendant reduction of pressure in the CFT. The other condition was the potential for water hammer due to the presence of air pockets in the ECCS lines and pumps.

To correct these conditions we stated that the following measures were necessary:

- (1) The normally closed motor-operated valves, CF-V3A and CF-V3B, shall have their power disconnected and the associated breakers locked open except when adjusting CFT pressure; and
- (2) The High and Low Pressure Injection pump casings and system high points shall be vented during each refueling outage.

The Safety Evaluation setting forth these requirements also noted that MetEd, by letter dated May 14, 1976, had committed to perform these actions prior to Cycle 2 power operation. The present application, proposes to incorporate these operating requirements into the Technical Specifications so that they will be routinely observed for all future operations.

Since the proposed changes were found necessary by our earlier review to provide increased assurance of the operability of the Core Flooding, Low Pressure Injection and High Pressure Injection Systems, and since this amendment merely incorporates these changes in the Technical Specifications, we conclude that the proposed changes will maintain reactor safety and are therefore acceptable.

#### Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR §51.5(d)(4) that an environmental impact statement, negative declaration, or environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

#### Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) 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: August 23, 1976