



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 61 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 December 4, 1978 (GOL 1934) Metropolitan Edison Company (the licensee) requested a change to the Three Mile Island Nuclear Station, Unit No. 1 (TMI-1) Technical Specifications (TSs). This change would revise the TSs by: (1) deleting 36 snubbers from a list of snubbers which must be operable during reactor operations, (2) adding a snubber to the list of snubbers which is considered part of the support of a safety related system and must be operable and (3) deleting a snubber that supports secondary river water pipe system from the list.

Discussion and Evaluation

Snubbers are energy absorbing devices of the pipe support system that limits pipe movement during normal operation and during accident conditions. The TMI-1 TS requires that all safety related snubbers which by definition serve as pipe supports for safety related systems, must be operable during reactor operation. Furthermore, the TSs list all snubbers that must meet the operability requirements. The licensee has requested several changes to this list as a result of their overall review of the safety related snubbers. Specifically, these proposed changes that would change Table 3.16.1 of the TSs include: (1) the removal from the list of 36 snubbers serving as supports for the cooling water system supplying coolant to the reactor coolant pump motor coolers, (2) the addition of one safety related snubber that was erroneously omitted from the list and (3) the removal of one snubber from the list that serves as a support for secondary river water pipe system, a non-safety related system. An evaluation of these three changes follows.

1. Deletion of 36 Snubbers from TS Table 3.16.1

The portion of the Nuclear Service Cooling System supported by the 36 snubbers supplies cooling water to reactor coolant pump motor coolers. The reactor coolant motor coolers are considered by the licensee as a component not required to mitigate the consequences of an accident nor are they required to operate to achieve safe shutdown of the plant in the event of a LOCA. For this reason, the licensee has considered this system not to be safety related and therefore the snubbers need not be listed in Table 3.16.1 of the TMI-1 TSs. Furthermore, pipe whip considerations do not apply for this system, since it is considered a low energy line (i.e., system design pressure and temperature are 150 psig and 95°F). We have reviewed the Nuclear Service Cooling System which supplies coolant to pump motor coolers and agree with the licensee that this system is not required to

bring the plant to safe shutdown conditions nor is it required to mitigate the consequences of an accident. In addition, the system is not required in the maintenance of a plant shutdown condition nor is the system necessary to be operable to mitigate the consequences of an accident while the plant is in a shutdown condition. Furthermore, in reviewing other plants performing the same (i.e., Sequoya, Unit No. 1) and having an identical system function, we noted that the Nuclear Service Cooling System is not considered safety related and need not be so. The failure of this system at TMI-1 will in no way interact with or affect the operability of other safety related systems. On this basis, we conclude that the 36 snubbers used to support Nuclear Service Cooling need not appear in Table 3.16.1 of the TMI-1 TSs and are not required to be operable during plant operation. We, therefore, find this proposed change acceptable.

2. Addition of Safety Related Snubber (BS-26A) in Table 3.16.1

Snubber BS-26A is considered a safety related snubber that was inadvertently omitted during the preparation of Table 3.16.1 for the TMI-1 TSs. Although this snubber was omitted from Table 3.16.1 of the TMI-1 TSs, it does appear in the plant operating procedures in which visual inspection and functional testing is performed to assure operability during plant operation in the plant. This change is considered editorial in nature, in that the addition of Snubber BS-26A in Table 3.16.1 brings the table in agreement with the detailed plant procedures. On this basis, we conclude the inclusion of Snubber of BS-26A in Table 3.16.1 does not affect plant safety and its inclusion is acceptable.

3. Deletion of One Snubber (IPE-9) From Table 3.16.1

The licensee proposed to delete snubber IPE-9 from Table 3.16.1 of the TMI-1 TSs. Snubber IPE-9 serves as a support for the secondary river water pipe system which is non-safety related system, and therefore need not meet the operability requirements called for under Table 3.16.1. This system is not required to be operable in order to bring the plant to a safe shutdown condition or mitigate the consequences of an accident. This snubber was erroneously included in Table 3.16.1 during its initial preparation. We have reviewed these requirements of the secondary water system and conclude that the deletion of Snubber IPE-9 from Table 3.16.1 will in no way compromise plant safety. On this basis, we conclude that the deletion of Snubber IPE-9 from Table 3.16.1 of the TMI-1 TSs is 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, or negative declaration and 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: January 26, 1981