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



SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 155 TO FACILITY OPERATING LICENSE NO. DPR-50

METROPOLITAN EDISON COMPANY JERSEY CENTRAL POWER & LIGHT COMPANY PENNSYLVANIA ELECTRIC COMPANY GPU NUCLEAR CORPORATION

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 1

DOCKET NO. 50-289

INTRODUCTION

By letter dated January 8, 1990, GPU Nuclear Corporation (the licensee) proposed changes to the Technical Specifications (TS) for Three Mile Island Unit 1 (TMI-1). The proposed change removes the provision that limits the combined time interval for three consecutive surveillances to less than 3.25 times the specified interval. Guidance on this proposed change to TS was provided to all power reactor licensees and applicants by Generic Letter 89-14, dated August 21, 1989.

EVALUATION

Table 1.2 of the TS includes the provision that allows a surveillance interval to be extended by 25 percent of the specified time interval. This extension provides flexibility for scheduling the performance of surveillances and to permit consideration of plant operating conditions that may not be suitable for conducting a surveillance at the specified time interval. Such operating conditions include transient plant operation or ongoing surveillance or maintenance activities. Table 1.2 further limits the allowance for extending surveillance intervals by requiring that the combined time interval for any three consecutive surveillances not exceed 3.25 times the specified time interval. The purpose of this provision is to assure that surveillances are not extended repeatedly as an operational convenience to provide an overall increase in the surveillance interval.

Experience has shown that the 18-month surveillance interval, with the provision to extend it by 25 percent, is usually sufficient to accommodate normal variations in the length of a fuel cycle. However, the NRC staff has routinely granted requests for one-time exceptions to the 3.25 limit on extending refueling surveillances because the risk to safety is low in contrast to the alternative of a forced shutdown to perform these surveillances. Therefore, the 3.25 limitation on extending surveillances has not been a practical limit on the use of the 25-percent allowance for extending surveillances that are performed on a refueling outage basis.

Extending surveillance intervals during plant operation can also result in a benefit to safety when a scheduled surveillance is due at a time that is not suitable for conducting the surveillance. This may occur when transient plant operating conditions exist or when safety systems are out of service for maintenance or other surveillance activities. In such cases, the benefit to safety of extending a surveillance interval would exceed any safety benefit derived by limiting the use of the 25-percent allowance to extend a surveillance. Furthermore, there is the administrative burden associated with tracking the use of the 25-percent allowance to ensure compliance with the 3.25 limit.

In view of these findings, the staff concluded that TS should be changed to remove the 3.25 limit for all surveillances because its removal will have an overall positive effect on safety. The guidance provided in Generic Letter 89-14 included the following change to this specification and removes the 3.25 limit on three consecutive surveillances with the following statement:

"4.0.2 Each Surveillance Requirement shall be performed within the specified surveillance interval with a maximum allowable extension not to exceed 25 percent of the specified surveillance interval."

In addition, the Bases of this specification were updated to reflect this change and noted that it is not the intent of the allowance for extending surveillance intervals that it be used repeatedly merely as an operational convenience to extend surveillance intervals beyond that specified.

The licensee has proposed changes that are consistent with the guidance provided in Generic Letter 89-14, as noted above. On the basis of its review of this matter, the staff finds that the above change to the TS for TMI-1 is acceptable.

ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted areas as defined in 10 CFR Part 20. We have determined that the amendment involves no significant increase in the amounts and no significant change in the types of any effluents that may be released off site, and that there is no significant increase in individual or cumulative occupational radiation exposure. The staff has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(S). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

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 (3) the issuance of this ameriament will not be inimical to the common defense and security or to the health and safety of the public.

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Principal Contributor:

Thomas G. Dunning

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Dated: September 25, 1990