



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 51 TO POSSESSION-ONLY LICENSE NO. DPR-73

GPU NUCLEAR, INC.

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 2

DOCKET NO. 50-320

1.0 INTRODUCTION

By letter dated February 16, 1995, GPU Nuclear, Inc. then known as GPU Nuclear Corporation, (GPUN, or licensee) submitted a request for changes to the Technical Specifications (TS) for Three Mile Island Nuclear Station, Unit No. 2. The proposed changes would extend the surveillance interval to demonstrate operability of the containment airlocks from quarterly to annually. The purpose of the change is to decrease the personnel exposure associated with implementing the surveillance. The changes would also allow a period of 24 hours to correct any inadvertently missed surveillance and delete an administrative requirement regarding time extensions on consecutive surveillance; these proposed changes would make the TMI-2 Technical Specifications consistent with TMI-1 and the Standard Technical Specifications for Babcock and Wilcox Plants (NUREG-1430, September 1992).

2.0 BACKGROUND

Three Mile Island Unit 2 (TMI-2) is in a permanently shutdown and defueled state of post-defueling monitored storage (PDMS), which is similar to SAFSTOR. The remaining TMI-2 staff conducts periodic monitoring and surveillance and limited dismantlement activities. Since the TMI-2 accident on March 28, 1979, the licensee has conducted a comprehensive cleanup program to ensure that the facility is safe and stable. Following mitigation of the accident and stabilization of the facility, the major efforts of the licensee during the past 17 years have included partial facility decontamination; removal of fuel from the reactor vessel and other facilities; offsite shipment of substantial quantities of both high-level and low-level radioactive wastes; and the removal, treatment, and disposal of the accident-generated water. The NRC staff issued a license amendment with attached safety evaluation on December 28, 1993, which allowed the facility to enter this long-term storage mode. The licensee is maintaining the facility in long-term storage until Three Mile Island Nuclear Station, Unit No. 1 (TMI-1), located on the same site as TMI-2, permanently ceases operation, at which time both facilities will be decommissioned.

3.0 EVALUATION

The proposed amendment would revise specification 4.1.1.3 of the surveillance section of the technical specifications (TS). This section currently requires that the airlock surveillance be performed quarterly. Allowing an annual surveillance would make the containment airlock surveillance consistent with the remainder of the containment penetrations and save 50 person-millirem per surveillance.

The NRC staff reviewed the licensing basis for the containment integrity surveillance and could not identify any adverse safety impact resulting from this change. The staff's previous safety evaluation for PDMS conditions, dated December 28, 1993, considered a variety of accident scenarios including (1) vacuum canister failure, (2) high pressure spray of contamination, (3) cutting contaminated pipe, (4) break of contaminated pipe, (5) elevator/stairwell fire in containment, (6) fire in the containment D-rings, (7) containment penetration failure, and (8) the rupture and release of resins from Makeup and Purification Demineralizers. For the most severe of these accidents, the fire in the containment D-rings, the total body and bone dose to the maximally exposed individual at the site boundary was 49 and 51 mrem, respectively. These results are a small part of the 10 CFR Part 20 limits and a very small fraction of 10 CFR Part 100 limits. The proposed change would not alter the staff's previous analysis and would not create a new potential accident scenario. The proposed change is acceptable to the NRC staff.

The proposed amendment would also revise TS Section 4.0.2 regarding the allowable time extension to complete surveillance requirements. The current specification allows a 25 percent time extension on each surveillance and a total 25 percent time extension on a series of four consecutive surveillances. The proposed change deletes the limitation regarding four consecutive surveillances. This proposed change will not affect plant equipment or safety. The change will make the TMI-2 TS consistent with the Standard Technical Specifications for Babcock and Wilcox Plants (NUREG-1430) and with the TMI-1 TS. The bases for the TS, which are included with Appendix A to the facility license but are not considered part of the TS, will be revised to reflect the change in 4.0.2. The staff finds this change acceptable.

The proposed change would modify TS Section 4.0.4 to allow a 24-hour period to complete a missed surveillance without entering an action statement. This delay is permitted to allow performance of the surveillance. This change will not affect plant equipment or safety. The change will make the TMI-2 TS consistent with the Standard Technical Specifications for Babcock and Wilcox Plants (NUREG-1430, September 1992) and with the TMI-1 TS. The bases for the TS, which are included with Appendix A to the facility license but are not considered part of the TS, will be revised to reflect the change in 4.0.4. The staff finds this change acceptable.

4.0 STATE CONSULTATION

In accordance with the regulations of the Commission, the Pennsylvania State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes surveillance requirements. The NRC staff has 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 offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (61 FR 28616). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the regulations of the Commission, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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Date: October 24, 1996