



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 198 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

1.0 INTRODUCTION

By letter dated January 16, 1995, as supplemented June 22, and September 20, 1995, the GPU Nuclear Corporation (the licensee) submitted a request for changes to the Three Mile Island Nuclear Station, Unit No. 1 (TMI-1) Technical Specifications (TSs). The requested changes revise the TSs to incorporate several improvements from the Revised Standard Technical Specifications for Babcock & Wilcox Plants (STS or NUREG-1430). The amendment also changes the Bases incorporating the results of analyses to support allowance for drift of the pressurizer code safety valve setpoint. The remaining portion of the request relating to revisions to Control Room Emergency Ventilation System are being reviewed separately. The June 22, and September 20, 1995, letters provided clarifying information that did not change the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

The licensee proposed to incorporate certain improvements from NUREG-1430 into the current TMI-1 TSs. A request to include the results from the analysis of the pressurizer code safety valve setpoints was also proposed. An evaluation of each change is provided below.

2.1 Containment Airlocks

The current TS do not include specific LCOs encompassing the unique containment integrity requirements associated with airlocks. The licensee's application proposes to correct this deficiency by adding a new Section 3.6.12 which is based on the requirements currently specified in the "Definitions" section of the TS, the current BASES, and standard requirements. The proposed change includes guidance and criteria associated with the overall containment leak rate evaluation. The changes would result in a better organized TS document having action requirements and repair periods consistent with current staff guidance. The proposed changes are therefore acceptable.

2.2 Hydrogen Recombiner System

TS 4.4.4 currently specifies that the hydrogen recombiner be subjected to surveillance testing at 6-month intervals. The licensee proposes to change TS 4.4.4 to specify that the tests be performed during each refueling outage. The wording of the TS would also be changed to clarify specific test methodology and criteria. (The clarified wording would not reduce the actual scope of testing nor the test acceptance criteria.) In addition, a 6-hour action period would be provided. This is necessary because the current TS provides a combined 7-day allowable outage time/action period, whereas current TS practice is to specify a separate allowable outage period (repair period) followed by an action period requirement for use in the event operability is not restored. The proposed changes are consistent with the the current staff positions related to recombiner surveillance testing. These staff positions are documented in NUREG-1366 "Improvements to Technical Specifications Surveillance Requirements" and NUREG-1430 and similar amendments have been issued for other facilities. The proposed changes are therefore acceptable.

2.3 Pressurizer Code Safety Valves (PCSV)

The licensee proposed to revise TS Table 4.1-2, Item 3. The current surveillance frequency of 50% each refueling period will be changed to the STS 3.4.10.1 which requires that the setpoint be tested in accordance with the Inservice Testing (IST) program. The IST program requires testing in accordance with the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI. Therefore, the surveillance frequency will be compatible with the ASME Code testing frequency, which is currently every 5 years. Although the current TS frequency is very similar to the ASME Code test frequency, TS compatibility with the ASME Code test frequency could prevent confusion if the two requirements were to differ appreciably due to unanticipated changes to the operating cycle or changes to the ASME Code. Therefore, these changes are acceptable.

2.4 Main Steam Safety Valves (MSSV)

Similar to the proposed change to TS Table 4.1-2 for the PCSV, the surveillance frequency for the MSSV (TS Table 4.1-2, Item 4) will be changed to the STS 3.7.1.1. STS 3.7.1.1 also requires that the MSSV setpoint be tested in accordance with the IST program which is in accordance with the ASME Code, Section XI. Therefore, the surveillance frequency will be compatible with the ASME Code testing frequency, which is currently every 5 years. Although the current TS frequency is very similar to the ASME Code test frequency, TS compatibility with the ASME Code test frequency could prevent confusion if the two requirements were to differ appreciably due to

unanticipated changes to the operating cycle or changes to the ASME Code. The NRC staff reviewed the request and finds the changes to the current TS Table 4.1-2, Item 4 to be acceptable.

2.5 Reactor Coolant System (RCS)

The licensee proposed to delete from the TMI-1 TSs a specific test following the opening of the RCS (TS 4.3). This particular testing is not a requirement specified in the STS. Also, the requirements for testing the RCS are covered in 10 CFR 50.55(a) which requires that the testing be performed in accordance with the requirements of ASME Code. The subject inspection and testing requirements following any opening, replacement or repair of the reactor coolant system are provided in ASME Code, Section XI. Deleting this requirement from the TS does not affect the ability of the plant to operate safely. The NRC staff reviewed the licensee's request and approves the deletion of TS 4.3.

2.6 Reactor Building Annual Inspection

TS 4.4.1.4 currently requires that a visual examination of the accessible interior and exterior surfaces of the containment structure and its components shall be performed annually and prior to any integrated leak rate test (ILRT) to uncover any evidence of deterioration which may affect either the containment's structural integrity or leak-tightness. The licensee's proposal emphasizes that the TS visual examination would be performed in accordance with 10 CFR 50, Appendix J (Ref: NUREG-1430 B&W Standard Technical Specifications) and deletes requirements for an annual inspection of the containment. These changes are based on (1) only inspections in accordance with Appendix J have been required since NUREG-0103, Rev. 4 was issued in 1980, (2) the general inspection prior to an ILRT will continue to be conducted in accordance with 10 CFR 50, Appendix J, and (3) the annual inspection is not required to be in the TS to avert an immediate threat to public health and safety. Therefore the proposed changes to TS 4.4.1.4 are acceptable.

2.7 Reactor Building Spray System

TS 4.5.3.1.a.2 currently requires that a test be performed every 5 years to demonstrate that spray nozzles are unobstructed. The test is required to be performed using compressed air. The current staff position for such testing is to allow 10 years between such tests (Ref: NUREG-1366 "Improvements to Technical Specifications Surveillance Requirements") and to permit either smoke or air to be used as the test fluid. Accordingly, the licensee's proposal to use air at 10-year intervals is acceptable.

2.8 Technical Review and Control

The licensee proposed to change the current TS 6.5.1.12 to delete the requirement for rendering a determination whether the activities of 1) proposed changes to the TSs and 2) investigations of violations of TSs

constitute an unreviewed safety question (USQ). Proposed changes to the TSs and investigations of violations of the TSs must be evaluated to ensure that they do not involve an USQ. Since both activities involve submittals for review by the Commission, review of these two activities to determine whether they constitute a USQ is not included among the activities required by STS 5.5.1.c. The Administrative Controls for the functions of Plant reviews and audits are described in STS 5.5.1.1.c. The NRC staff reviewed the proposed changes to TS 6.5.1.12 and finds them acceptable.

3.0 STATE CONSULTATION

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

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The amendment also relates to changes in recordkeeping, reporting, or administrative procedures or 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 (60 FR 14021). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and (10). 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.

5.0 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 Commission's regulations, 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 10, 1995