



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 196 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 August 11, 1995, the GPU Nuclear Corporation (GPUN, the licensee) submitted a request for changes to the Three Mile Island Nuclear Station, Unit 1 (TMI-1) Technical Specifications (TS). The requested changes would remove Section 3.2 of the TMI-1 TS, "Makeup and Purification and Chemical Addition Systems," and the associated bases. The pertinent design requirements and bases that are not already in the TMI-1 Updated Final Safety Analysis Report (UFSAR), such as boron concentration and minimum volume of tanks such as the boric acid mixing tank, are being incorporated into the UFSAR.

2.0 BACKGROUND

Section 50.36 of Title 10 of the Code of Federal Regulations (10 CFR 50.36) establishes the regulatory requirements related to the content of TS. The rule requires that TS include items in specific categories, including safety limits, limiting conditions for operation, and surveillance requirements; however, the rule does not specify the particular requirements to be included in a plant's TS. The NRC developed criteria, as described in the "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors," (58 FR 39132, July 22, 1993) to determine which of the design conditions and associated surveillances need to be located in the TS because the requirement is "necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety." Briefly, those criteria are (1) detection of abnormal degradation of the reactor coolant pressure boundary, (2) boundary conditions for design basis accidents and transients, (3) primary success paths to mitigate design basis accidents and transients, and (4) functions determined to be important to risk or operating experience. The Commission's final policy statement acknowledged that its implementation may result in the relocation of existing

TS requirements to licensee-controlled documents and programs. The criteria stated in the policy statement have also been recently codified in NRC regulations in a change to 10 CFR 50.36 (60 FR 36953, July 19, 1995). The FEDERAL REGISTER Notice related to this rulemaking stated the following:

... Each licensee covered by these regulations may voluntarily use the criteria as a basis to propose the relocation of existing technical specifications that do not meet any of the criteria from the facility license to licensee-controlled documents. The voluntary conversion of current technical specifications in this manner is expected to produce an improvement in the safety of nuclear power plants through a reduction in unnecessary plant transients and more efficient use of NRC and industry resources.

3.0 EVALUATION

The functions, design requirements/assumptions, and design bases of the TMI-1 Makeup, Purification, and Chemical Addition Systems are discussed in detail in 9.1 and 9.2 of the TMI-1 UFSAR. Section 3.2 of the TS does not contain any instrumentation used to detect abnormal degradation of the reactor coolant pressure boundary. In fact it contains no references or requirements pertaining to any instrumentation at all. No parameters of these systems are considered an initial condition or a primary success path to any design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The volumes and boron concentrations of the tanks in these systems are not risk significant and were, therefore, not considered in the TMI-1 probabilistic risk assessment. Therefore, the requirements currently contained in TS 3.2 do not meet the criteria in the NRC "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors," as codified by the revision to 10 CFR 50.36 and are, therefore, not required to be maintained in the TS. The proposed amendment is expected to produce an improvement in safety through reduced potential action statement-induced plant transients.

Design basis accident and transient analysis criteria regarding emergency core cooling system (ECCS) cold shutdown boration requirements will be maintained in TMI-1 TS Section 3.3. These are separate systems from those in Section 3.2 of the TS. Administrative relocation of the existing TS 3.2 requirements for the Makeup, Purification, and Chemical Addition Systems to the UFSAR ensures that these system requirements and bases are appropriately controlled in accordance with the requirements of 10 CFR 50.59.

On this basis, the staff concludes that the Makeup, Purification, and Chemical Addition Systems do not need to be controlled by TS, and changes to the design bases of these systems will be adequately controlled by 10 CFR 50.59, "Changes, tests, and experiments." Should the licensee's determination regarding any changes to these sections of the UFSAR conclude that an unreviewed safety question is involved, due to either (1) an increase in the probability or consequences of accidents or malfunctions of equipment

important to safety, (2) the creation of a possibility for an accident or malfunction of a different type than any evaluated previously, or (3) a reduction in the margin of safety, NRC approval would be required prior to implementation of the change. NRC inspection and enforcement programs also enable the staff to monitor facility changes and licensee adherence to UFSAR commitments and to take any remedial action that may be appropriate.

The staff has concluded, therefore, that relocation of TS Section 3.2 is acceptable because (1) its inclusion in technical specifications is not specifically required by 10 CFR 50.36 or other regulations, (2) the TS is not required to avert an immediate threat to the public health and safety, and (3) changes that are deemed to involve an unreviewed safety question will require prior NRC approval in accordance with 10 CFR 50.59(c).

4.0 STATE CONSULTATION

In accordance with the Commission's regulations the staff made a good faith effort to contact the Pennsylvania State official for comments on September 19, 1995.

5.0 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. 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 43172). 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 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: September 19, 1995