

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 202

TO FACILITY OPERATING LICENSE NO. DPR-16

GPU NUCLEAR, INC. AND

JERSEY CENTRAL POWER & LIGHT COMPANY

OYSTER CREEK NUCLEAR GENERATING STATION

DOCKET NO. 50-219

1.0 INTRODUCTION

By letter dated July 23, 1998, as supplemented September 25, 1998, GPU Nuclear, Inc., (the licensee) submitted a request for changes to the Oyster Creek Nuclear Generating Station Technical Specifications (TSs). The requested changes would establish that the existing Safety Limit Minimum Critical Power Ratio (SLMPCR) contained in TS 2.1.A is applicable for the next operating cycle (Cycle 17). The September 25, 1998, letter provided clarifying information within the scope of the original application and did not change the staff's initial proposed no significant hazards consideration determination.

2.0 EVALUATION

The safety limit MCPR (SLMCPR) in TS 2.1.A for Cycle 17 is not changed from the value of 1.09 for the current Cycle 16 operation. This value is for the reactor pressure ≥ 800 psia and the core flow ≥ 10% of rated. The applicable cycle number in the footnote to TS 2.1.A would be changed from Cycle 16 to Cycle 17 operation only.

The licensee described the methodology used to calculate the new SLMCPR value for the TS in the submittal. The Cycle 17 SLMCPR analysis was performed by GE using the plant- and cycle-specific fuel and core parameters, NRC-approved methodologies including GESTAR-II (NEDE-24011-P-A-11, Sections 1.1.5 and 1.2.5) and proposed Amendment 25 to GESTAR-II. The proposed Amendment 25 to GESTAR-II provides cycle-specific SLMCPRs that replace the former generic, bounding SLMCPR.

The staff has reviewed the following: (1) the justification for the SLMCPR value of 1.09 for the Cycle 17 operation, and (2) the relevant information provided in the proposed Amendment 25 to GESTAR-II, NEDE-24011 (which is under the staff review).

The Cycle 17 SLMCPR analysis for Oyster Creek using the plant-specific calculation in conjunction with the approved method is acceptable for Oyster Creek. The Cycle 17 SLMCPR will ensure that 99.9% of the fuel rods in the core will not experience boiling transition which satisfies the requirements of General Design Criterion 10 of Appendix A to 10 CFR Part 50

9811090278 981105 PDR ADOCK 05000219 PDR regarding acceptable fuel design limits. The justification for analyzing and determining the SLMCPR value of 1.09 for Oyster Creek Cycle 17 operation is acceptable since (1) the approved methodologies were used, and (2) the current TS limit of 1.09 is conservative to the Cycle 17 calculated SLMCPR of 1.08.

Based on our review, the staff concludes that the above described TS changes involving the SLMCPR, and applicable cycle number in the footnote for the SLMCPR values in TS 2.1.A are acceptable for the Oyster Creek Nuclear Generating Station Cycle 17 operation because the change was analyzed based on the NRC-approved methods using Oyster Creek cycle-specific inputs and the fuel bundles in the core for Cycle 17 operation.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New Jersey 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. 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 (63 FR 45525). 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.

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: November 5, 1998