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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 147

TO PROVISIONAL OPERATING LICENSE NO. DPR-16

GPU NUCLEAR CORPORATION AND
JERSEY CENTRAL POWER & LIGHT COMPANY

OYSTER CREEK NUCLEAR GENERATING STATION

DOCKET NO. 50-219

1.0 INTRODUCTION

By letter dated May 7, 1990 (Ref. 1) as supplemented by letters dated September 14, 1990 (Ref. 2), and December 13, 1990 (Ref. 3), GPU Nuclear Corporation (the licensee) proposed changes to the Technical Specifications (TS) for the Oyster Creek Nuclear Generating Station (OCNGS). The information provided in the September 14, 1990 and December 13, 1980 letters are in accordance with the guidance contained in Generic Letter 88-16 and have no effect on the no significant hazards consideration conclusions. The proposed changes would modify specifications having cycle-specific parameter limits by replacing the values of those limits with a reference to a Core Operating Limits Report (COLR). The proposed changes also include the addition of the COLR to the Definitions section and to the reporting requirements of the Administrative Controls section of TS. Guidance on the proposed changes was developed by NRC on the basis of the review of a lead-plant proposal submitted on the Oconee Plant docket by Duke Power Company. This guidance was provided to all power reactor licensees and applicants by Generic Letter 88-16, dated October 4, 1988 (Ref. 4).

2.0 EVALUATION

The licensee's proposed changes to the TS are in accordance with the guidance provided by Generic Letter 88-16 and are addressed below.

(1) The Definitions section of the TS would be modified to include a definition of the COLR that requires cycle/reload-specific parameter limits to be established on a unit-specific basis in accordance with NRC-approved methodologies that maintain the limits of the safety analysis. The definition notes that plant operation within these limits is addressed by individual specifications.

(2) The following specifications were revised to replace the values of cycle-specific parameter limits with a reference to the COLR that provides these limits.

(a) Specification 3.10.A

The Average Planar Linear Heat Generation Rate (APLHGR) limits for this specification are specified in the COLR (Figures 1 through 7).

(b) Specification 3.10.B

The local Linear Heat Generation Rate (LHGR) limits for this specification are specified in the COLR (Figure 10).

(c) Specification 3.10.C

The Minimum Critical Power Ratio (MCPR) limits and the MCPR core flow factor (K_f) for this specification are specified in the COLR (Figure 8 and Figure 9, respectively).

These changes to the specifications also required changes to the bases. Based on our review, we conclude that the changes to the bases are acceptable.

(3) Specification 6.9.1.f was added to the reporting requirements of the Administrative Controls section of the TS. This specification requires that the COLR be submitted, upon issuance, to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector. The report provides the values of cycle-specific parameter limits that are applicable for the current fuel cycle. Furthermore, this specification requires that the values of these limits be established using an NRC-approved methodology and be consistent with all applicable limits of the safety analysis. The approved methodology is the following:

(a) GPU Nuclear (GPUN) Topical Report (TR) 020, Methods for the Analysis of Boiling Water Reactors Lattice Physics (The approved revision at the time reload analyses analyses are performed shall be identified in the COLR.)

(b) GPUN TR 021, Methods for the Analysis of Boiling Water Reactors Steady State Physics (The approved revision at the time reload analyses are performed shall be identified in the COLR.)

(c) GPUN TR 033, Methods for the Generation of Core Kinetics Data for RETRAN-02 (The approved revision at the time reload analyses are performed shall be identified in the COLR.)

(d) GPUN TR 040, Steady-State and Quasi-Steady-State Methods Used in the Analysis of Accidents and Transients (The approved revision at the time reload analyses are performed shall be identified in the COLR.)

(e) GPUN TR 0'5, BWR-2 Transient Analysis Model Using the Retran Code (The approved revision at the time reload analyses are performed shall be identified in the COLR.)

(f) NEDE-31462P and NEDE-31462, Oyster Creek Nuclear Generating Station SAFER/CORECOOL/GESTR-LOCA Loss-of-Coolant Accident Analysis (The approved revision at the time reload analyses are performed shall be identified in the COLR.)

(g) NEDE-24011, General Electric Standard Application for Reactor Fuel (The approved revision at the time reload analyses are performed shall be identified in the COLR.)

(h) NEDE-24195, General Electric Reload Fuel Application for Oyster Creek (The approved revision at the time reload analyses are performed shall be identified in the COLR.)

(i) XN-75-55-(A); XN-75-55, Supplement 1-(A); XN-75-55, Supplement 2-(A), Revision 2, "Exxon Nuclear Company WREM-Based NJP-BWR ECCS Evaluation Model and Application to the Oyster Creek Plant," April 1977

(j) XN-75-36(,,P)-(A); XN-75-36(NP), Supplement 1-(A), "Spray Cooling Heat Transfer Phase Test Results, ENC - 8x8 BWR Fuel 60 and 63 Active Rods, Interim Report," October 1975

Finally, the specification requires that all changes in cycle-specific parameter limits be documented in the COLR before each reload cycle or remaining part of a reload cycle and submitted upon issuance to NRC, prior to operation with the new parameter limits.

On the basis of the review of the above items, the NRC staff concludes that the licensee provided an acceptable response to those items as addressed in the NRC guidance in Generic Letter 88-16 on Modifying cycle-specific parameter limits in TS. Because plant operation continues to be limited in accordance with the values of cycle-specific parameter limits that are established using NRC approved methodologies, the NRC staff concludes that the change is administrative in nature and there is no impact on plant safety as a consequence. Accordingly, the staff finds that the proposed changes are acceptable.

As part of the implementation of Generic Letter 88-16, the staff has also reviewed a sample COLR that was provided by the licensee. On the basis of this review, the staff concludes that the format and content of the sample COLR are acceptable.

We have reviewed the request by the GPU Nuclear Corporation to modify the Technical Specifications of the Oyster Creek Nuclear Generating Station that would remove the specific values of some cycle-dependent parameters from the specifications and place the values in a COLR that would be referenced by the specifications. Based on this review, we conclude that these Technical Specification modifications are acceptable because they are in accordance with Generic Letter 88-16.

3.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The amendment also relates to changes in recordkeeping, reporting, or administrative procedures or requirements. 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 offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The staff has previously issued a proposed finding that this 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)(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 this amendment.

4.0 CONCLUSION

The staff 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, and (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 nor to the health and safety of the public.

5.0 REFERENCES

1. Letter from E. E. Fitzpatrick (GPUN) to NRC, dated May 7, 1990.

2. Letter from E. E. Fitzpatrick (GPUN) to NRC, dated September 14, 1990.

3. Letter from M. W. Laggart (GPUN) to NRC, dated December 13, 1990.

4. Generic Letter 88-16, "Removal of Cycle-Specificat Parameter Limits from Technical Specifications," dated October 4, 1988.

Principal Contributor: T. Huang

Dated: February 20, 1991