GPU NUCLEAR CORPORATION
OYSTER CREEK NUCLEAR GENERATING STATION

PROVISIONAL OPERATING
LICENSE NO. DPR-16

Technical Specification
Change Request No. 166, Rev. 1
Docket No. 50-219

Applicant submits, by this Technical Specification Change Request No. 166, Rev. 1 to the Oyster Creek Nuclear Generating Station Technical Specifications, a change to pages 3.10-1, 3.10-2, 3.10-3, 3.10-4, 3.10-5, 3.10-6, 3.10-10 and 3.10-11.

By: R. F. Wilson
R. F. Wilson
Vice President
Technical Functions

Sworn and subscribed to before me this 22th day of September 1983.

Josephine J. Brzozowski
NOTARY PUBLIC OF NEW JERSEY

JOSEPHINE J. BRZOZOWSKI
NOTARY PUBLIC OF NEW JERSEY
MY COMMISSION EXPIRES OCT. 5, 1988

7327f

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF)		
)	DOCKET NO. 50-219	
GPU NUCLEAR CORPORATION)		

CERTIFICATE OF SERVICE

This is to certify that a copy of Technical Specification Change Request No. 166, Rev. 1 for the Oyster Creek Nuclear Generating Station Technical Specifications, filed with the United States Nuclear Regulatory Commission on September 22, 1988, has this day of September 22 , 1988, been served on the Mayor of Lacey Township, Ocean County, New Jersey by deposit in the United States mail, addressed as follows:

The Honorable Christopher Connors
Mayor of Lacey Township
818 West Lacey Road
Forked River, NJ 08731

By: ______________________
R. F. Wilson
Vice President
Technical Functions

DATED:

7327f

GPU Nuclear

GPU Nuclear Corporation
One Upper Pond Road
Parsippany, New Jersey 07054
201-316-7000
TELEX 136-482
Writer's Direct Dial Number:

September 22, 1988

The Honorable Christopher Connors
Mayor of Lacey Township
818 West Lacey Road
Forked River, NJ 08731

Dear Mayor Connors:

Enclosed herewith is one copy of the Technical Specification Change Request No. 166, Rev. 1 for the Oyster Creek Nuclear Generating Station Operating Licensing.

This document was filed with the United States Nuclear Regulatory Commission on September 22, 1988.

Very truly yours,

R. F. Wilson
Vice President
Technical Functions

RFW/JDL/pa
Enclosure

7227f

GPU Nuclear

GPU Nuclear Corporation
One Upper Pond Road
Parsippany, New Jersey 07054
201-316-7000
TELEX 136-482
Writer's Direct Dial Number:

September 22, 1988

Ms. Jenny Moon, Acting Chief
Bureau of Radiation Protection
Department of Environmental Protection
380 Scotch Road
Trenton, NJ 08628

Dear Ms. Moon:

Subject: Oyster Creek Nuclear Generating Station
Provisional Operating License No. DPR-16
Technical Specification Change Request No. 166, Rev. 1

Pursuant to 10CFR50.91(b)(1), please find enclosed a copy of the subject document which was filed with the United States Nuclear Regulatory Commission on September 22, 1988.

Very truly yours,

R. F. Wilson
Vice President
Technical Functions

RFW/JDL/pa
Enclosure

7327f

OYSTER CREEK NUCLEAR GENERATING STATION
PROVISIONAL OPERATING LICENSE NO. DPR-16
DOCKET NO. 50-219
TECHNICAL SPECIFICATION CHANGE REQUEST NO. 166, Rev. 1

Applicant hereby requests the Commission to change Appendix A to the above captioned license as indicated below. Pursuant to 10CFR50.91, an analysis concerning the determination of no significant hazards considerations is also presented:

1. Section to be Changed

   3.10

2. Extent of Change

   Modify Section 3.10 to accommodate the Cycle 12 Reload. Specifically, MCPR and MAPLHGR limits will be changed.

3. Changes Requested

   As indicated in the attached revised Technical Specification pages 3.10-1, 3.10-2, 3.10-3, 3.10.4, 3.10-5, 3.10-6, 3.10-10 and 3.10-11.

4. Discussion

   The Cycle 11 core for Oyster Creek consisted of 560 fuel assemblies, the composition of which included Exxon Type VB assemblies and General Electric P8x8R assemblies. The Cycle 12 core will consist of Exxon Type VB assemblies and General Electric P8x8R and GE8x8EB assemblies. The GE8X8EB fuel design will be introduced for the first time into the Oyster Creek core for Cycle 12.

   By letter dated November 25, 1985 GPU Nuclear conveyed to the NRC its intent of performing the Cycle 12 Reload analysis in-house. Consistent with that intent, the following GPU Nuclear Topical Reports (to be used in the Cycle 12 Reload analysis) were submitted for NRC approval; TR-020 "Methods for the Analysis of Boiling Water Reactors Lattice Physics", TR-021 "Methods for the Analysis of Boiling Water Reactors Steady State Physics", TR-033 "Methods for the Generation of Core Kinetics Data for RETRAN-02", TR-040 "Steady-State and Quasi-Steady-State Methods used in the Analysis of Accident and Transients" and TR-045 "BWR-2 Transient Analysis Model using the RETRAN Code". GPU Nuclear Topical Report 049 "Reload Information and Safety Analysis Report for Oyster Creek Cycle 12 Reload" submitted with TSCR #166, is a summary of the results of the Cycle 12 reload core design and safety analysis. Revision 1 to GPU Nuclear Topical Report 049 submitted with TSCR #166, Revision 1, incorporates consideration of uncertainties for input variables to code correlation as discussed in GPU Nuclear's response to the NRC's request for additional information concerning GPU Nuclear Topical Report 045.

Licensing topical report NEDE-30996-P "SAFER MODEL EVALUATION OF LOSS-OF-COOLANT ACCIDENTS FOR JET PUMP AND NON-JET PUMP PLANTS" was submitted for NRC review by the General Electric Company on June 25, 1986. The NRC staff issued its safety evaluation addressing the acceptability of referencing licensing topical report NEDE-30996-P, Volume II, on May 11, 1987. NEDE-31462P "OYSTER CREEK NUCLEAR GENERATING STATION SAFER/CORECOOL/GESTR-LOCA LOSS-OF-COOLANT ACCIDENT ANALYSIS", submitted with TSCR #166, represents the Oyster Creek plant specific application of the approved NEDE-30996-P, Volume II methodology. As discussed in NEDE-31462P, the Oyster Creek plant specific SAFER/CORECOOL/GESTR-LOCA analysis meets the explicit requirements of the staff's safety evaluation of May 11, 1987 and the criteria of 10CFR50.46.

With respect to the proposed MCPR limit, the Turbine Trip Without Bypass transient was the most limiting for Cycle 12 with a maximum Delta-CPR of 0.37. The proposed MCPR value of 1.51 was conservatively chosen based on a safety limit of 1.07, a maximum Delta-CPR of 0.37 and a statistical multiplier of 1.049. This represents an increase from the Cycle 11 MCPR valve which was 1.45.

With respect to the proposed MAPLHGR limits, the analysis demonstrated that the DBA is the PCT limiting break size and resulted in higher MAPLHGR values of approximately 0.7 KW/ft at low exposure. Operating the Cycle 12 bundles within the proposed MAPLHGR limits insures that the PCT will not exceed the performance criteria of 10 CFR 50.46 during a LOCA situation.

The proposed Technical Specifications have been based on the results of the analysis discussed above and thereby provide reasonable assurance that the health and safety of the public will not be endangered by operating in the proposed manner.

5. Determination

GPU Nuclear has determined that operation of the Oyster Creek Nuclear Generating Station in accordance with the proposed technical specifications does not involve a significant hazard. The changes do not:

1. Involve a significant increase in the probability or the consequence of an accident previously evaluated. The probability of an accident is not dependent upon the core loading and there are no other changes to the plant configuration, availability of safety systems, the manner in which the safety systems are initiated or the way the plant is operated that will increase the probability of an accident. Cycle 12 introduces a new fuel design, GE8X8EB, which has been reviewed and approved by the NRC; letter from H. Berkow (NRC) to J. S. Charnley (GE) dated December 3, 1985, "Acceptance for Approval of Fuel Designs Described in Licensing Topical Report NEDE-24011-P-A-6, Amendment 10 for Extended Burnup Operation." The fuel design has been incorporated into the reload applications of other BWR plants. The neutronic and mechanical design is not significantly different from designs currently in use at Oyster Creek and the fuel will not be operated in a manner that would cause the consequences of an accident to be increased.

2. Create the possibility of a new or different kind of accident from any previously evaluated. The Cycle 12 core loading does not involve any other change to the plant configuration, nor does it change the availability of safety systems or the manner in which they respond to initiating events. Also, the design does not change the manner in which the core will be operated from previous cycles. As such, the

possibility of a new or different kind of accident from any previously evaluated is not created.

3. Involve a significant reduction in a margin of safety. The proposed Technical Specifications are based on analysis results which were performed in accordance with methods and procedures developed by GPUN and GE. The GPUN methods have been submitted to the NRC for their review and approval. NRC approval requires GPUN to demonstrate the adequacy of the methods for the analyses to be performed, that the methods account for the uncertainties in the analyses, and that GPUN can adequately employ the methods for their application. All of the methods used by GPUN have been submitted to the NRC and have been approved except for TR-045 which is under review and addresses system transients using the RETRAN-02 computer code. NRC approval of TR-045 is expected since the methods employed have been used by other utilities in similar applications, the methods account for uncertainties and the methods provide results which are consistent with previous reload analyses. Currently, the RETRAN-02 code itself is being reviewed by the NRC for use in reload analyses.

   The GE LOCA analyses, NEDE-31462P, "Oyster Creek Nuclear Generating Station SAFER/CORECOOL/GESTR-LOCA LOSS-OF-COOLANT ACCIDENT ANALYSIS," submitted with this reload application is based on a methodology previously approved by the NRC via a May 11, 1987 safety evaluation addressing NEDE-30996-P, Volume II. This methodology has been used by other utilities in reload applications, and, as in the case of TR-045, NRC approval of the Oyster Creek application is expected.

   Therefore, the results of the analyses presented in TR-049 and NEDE-31462P and the technical specification changes based on these results will ensure that there is no significant reduction in the margin of safety.