

GPU Nuclear, Inc.  
Oyster Creek Nuclear Generating Station

Facility License No. DPR-16

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Technical Specification Change Request No. 250  
Docket No. 50-219

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Applicant hereby submits changes to Appendix A Technical Specification pages 2.1-1 and 3.10-2 and Bases pages 2.1-3 and 3.10-3. Pages 2.1-2, 2.1-3 and 3.10-4 are to be replaced to provide capitalized definitions where they appear and ensure a uniform font in Sections 2.1 and 3.10.

By:

*Michael B. Roche*

Michael B. Roche  
Vice President and Director  
Oyster Creek

Sworn and Subscribed to before me this 4<sup>th</sup> day of October, 1996.

*Geraldine E. Levin*

A Notary Public of NJ

GERALDINE E. LEVIN  
NOTARY PUBLIC OF NEW JERSEY  
My Commission Expires 6-8-2000

# **Attachment 1**

## **Oyster Creek Nuclear Generating Station Technical Specification Change Request No. 250**

### **I. Changes Requested**

GPU Nuclear requests that Appendix A Technical Specification pages be replaced as follows:

Replace pages 2.1-1, 2.1-2, 2.1-3, 3.10-1, 3.10-2, 3.10-3 and 3.10-4. Pages 2.1-1, 2.1-3, 3.10-2 and 3.10-3 contain the requested changes. Pages 2.1-2, 3.10-1 and 3.10-4 are to be replaced to provide a uniform font for Sections 2.1 and 3.10 and to capitalize definitions where they appear in specifications and bases.

### **II. Discussion of Proposed Changes**

The proposed change involves revising the SLMCPR contained in Specification 2.1.A. In the course of calculating a cycle-specific SLMCPR for another utility, GE Nuclear Energy (GENE) determined that the GESTAR II ("General Electric Standard Application for Reactor Fuel," NEDE-24011-P-A-11, and U. S. Supplement, NEDE-24011-P-A-11-US, November 17, 1995) fuel type generic SLMCPR may be non-conservative when applied to some actual core and fuel designs. The U. S. Nuclear Regulatory Commission (USNRC) was informed by GENE of this condition in a telephone call on March 27, 1996, and was the subject of a 10 CFR Part 21 notification from GENE dated May 24, 1996.

GENE's calculation of the revised Oyster Creek SLMCPR value for Cycle 16 is based upon USNRC approved methods ("General Electric Standard Application for Reactor Fuel," NEDE-24011-P-A-11, and U. S. Supplement, NEDE-24011-P-A-11-US, November 17, 1995) and interim implementing procedures. Revision 11 of GESTAR II requires that the SLMCPR be reconfirmed each cycle. This reconfirmation was performed using the interim implementing procedures discussed with GENE during their meetings with the NRC staff on April 17, 1996 and May 6 through 10, 1996. The implementing procedures incorporate cycle-specific parameters into the analysis which include: 1) the actual core loading, 2) conservative variations of projected control blade patterns, 3) the actual bundle parameters (e.g., local peaking), and 4) the full cycle exposure range.

As a result of the revision to the SLMCPR, the operating MCPR limit which provides adequate margin to the SLMCPR to ensure reactor stability should be revised accordingly.

### **III. Safety Assessment**

The proposed TS change will revise TS 2.1.A to reflect the change in the SLMCPR due to the plant specific evaluation performed by GENE for Oyster Creek. The new SLMCPR is

calculated using NRC approved methods ("General Electric Standard Application for Reactor Fuel," NEDE-24011-P-A-11, and U. S. Supplement, NEDE-24011-P-A-11-US, November 17, 1995) and interim implementing procedures as discussed during the GENE meetings with the NRC on April 17, 1996 and May 6 through 10, 1996. The SLMCPR is set high enough to ensure that greater than 99.9% of all fuel rods in the core avoid transition boiling if the limit is not violated. The SLMCPR incorporates margin for uncertainty in the core operating state and for uncertainties which are dependent on fuel type, including fuel bundle nuclear characteristics, critical power correlation, and manufacturing tolerances. These interim procedures have been revised to incorporate cycle-specific parameters which include: 1) the actual core loading, 2) conservative variations of projected control blade patterns, 3) the actual bundle parameters (e.g., local peaking), and 4) the full cycle exposure range. The new SLMCPR for Oyster Creek is 1.09, revised from 1.07.

To accommodate the revision to the SLMCPR, the operating MCPR limit for stability in TS 3.10 C is being changed to 1.49, revised from 1.47.

#### **IV. Information Supporting a Finding of No Significant Hazards Consideration**

GPU Nuclear has concluded that the proposed change to the SLMCPR does not involve a Significant Hazards Consideration. In support of this determination, an evaluation of each of the three (3) standards set forth in 10 CFR 50.92 is provided below.

1. The proposed TS changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

The derivation of the revised SLMCPR for Oyster Creek for incorporation into the TS, and its use to determine cycle-specific thermal limits, have been performed using NRC-approved methods. Additionally, interim implementing procedures, which incorporate cycle-specific parameters, have been used. Based on the use of these calculations, the revised SLMCPR will not increase the probability or consequences of an accident.

The basis of the MCPR Safety Limit calculation is to ensure that greater than 99.9% of all fuel rods in the core avoid transition boiling if the limit is not violated. The new SLMCPR preserves the existing margin to transition boiling and fuel damage in the event of a postulated accident. The probability of fuel damage is not increased.

Revising the operating MCPR limit for stability will ensure that adequate margin is retained to the SLMCPR.

Therefore, the proposed TS change does not involve an increase in the probability or consequences of an accident previously evaluated.

2. The proposed TS changes do not create the possibility of a new or different kind of accident from any accident previously evaluated

The MCPR Safety Limit is a Technical Specification numerical value designed to ensure that fuel damage from transition boiling does not occur as a result of the limiting postulated accident. The stability MCPR limit ensures an adequate operating MCPR margin to the SLMCPR. These revised limits cannot create the possibility of any new type of accident. The new SLMCPR has been calculated using NRC-approved methods. Additionally, interim procedures, which incorporate cycle-specific parameters, have been used. Therefore, the proposed TS change does not create the possibility of a new or different kind of accident, from any accident previously evaluated.

3. The proposed TS changes do not involve a significant reduction in a margin of safety

The margin of safety as defined in the TS Bases will remain the same. The new SLMCPR is calculated using NRC-approved methods which are in accordance with the current fuel design and licensing criteria. Additionally, interim implementing procedures, which incorporate cycle-specific parameters, have been used. The MCPR Safety Limit remains high enough to ensure that greater than 99.9% of all fuel rods in the core will avoid transition boiling if the limit is not violated, thereby preserving fuel cladding integrity. The revised stability MCPR limit retains the existing margin to the SLMCPR. Therefore, the proposed TS change does not involve a reduction in a margin of safety.

## **V. Information Supporting an Environmental Assessment**

An environmental assessment is not required for the proposed changes since the proposed changes conform to the criteria for "actions eligible for categorical exclusion" as specified in 10 CFR 51.22(c)(9). The proposed changes will have no impact on the environment. The proposed changes do not involve a significant hazards consideration as discussed in the preceding section. The proposed changes do not involve a significant change in the types or significant increase in the amounts of any effluents that may be released offsite. In addition, the proposed changes do not involve a significant increase in individual or cumulative occupational radiation exposure.

## **VI. Conclusion**

The proposed changes to the TS have been reviewed in accordance with Section 6.5 of the Oyster Creek Technical Specifications and it has been concluded there are no unreviewed safety questions. As discussed above, using the standards in 10 CFR 50.92, GPU Nuclear believes there are no Significant Hazards Considerations involved with the proposed changes.

## **Attachment 2**

### **Revised Technical Specification Pages**