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October 15, 1999

Docket Nos. 50-321

HL-5842

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

Edwin I. Hatch Nuclear Plant - Unit 1  
Request to Revise Technical Specifications:  
Safety Limit Minimum Critical Power Ratios (SLMCPR)

Ladies and Gentlemen:

In accordance with the provisions of 10 CFR 50.90, as required by 10 CFR 50.59(c)(1), Southern Nuclear Operating Company (SNC) hereby proposes a change to the Plant Hatch Unit 1 Technical Specifications, Appendix A to Operating License DPR-57. This application proposes to change the Safety Limit Minimum Critical Power Ratios (SLMCPR) in Technical Specification (TS) 2.1.1.2 to reflect results of a cycle specific calculation performed for Unit 1 Operating Cycle 19, using the new, NRC approved methodology for determining SLMCPRs.

Enclosure 1 provides a description of the proposed changes and an explanation of the basis for the changes. Enclosure 2 details the bases for SNC's determination that the proposed changes do not involve a significant hazards consideration. Enclosure 3 provides page change instructions for incorporating the proposed changes. Following Enclosure 3 are the revised Technical Specifications page and the corresponding marked-up page.

The information supporting these proposed changes was provided by GE Nuclear Energy and is considered to be General Electric Proprietary information as described in 10 CFR 2.790(a)(4) and the attached affidavit (Attachment 1). It is requested that this information be withheld from public disclosure. Proprietary text is denoted by enclosure in double brackets and located by brackets in the right hand margins. A nonproprietary version of Enclosure 1 is attached for public disclosure (Attachment 2).

Southern Nuclear Operating Company requests the proposed amendment for Cycle 19 to be issued with the amendment to be effective within 30 days after approval.

In accordance with the requirements of 10 CFR 50.91, the designated State official will be sent a copy of this letter and all applicable enclosures.

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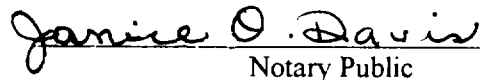
Mr. H. L. Sumner, Jr. states he is Vice President of Southern Nuclear Operating Company and is authorized to execute this oath on behalf of Southern Nuclear Operating Company, and to the best of his knowledge and belief, the facts set forth in this letter are true.

Respectfully submitted,



H. L. Sumner, Jr.

Sworn to and subscribed before me this 15th day of October 1999.



Notary Public

Commission Expiration Date: ~~\_\_\_\_\_~~ MY COMMISSION EXPIRES SEPTEMBER 17, 2000

Enclosures:

1. Basis for Change Request
2. 10 CFR 50.92 Evaluation
3. Page Change Instructions

Attachments:

1. Affidavit of Proprietary Information
2. Nonproprietary Version of the Basis for Change Request

IFL/eb

cc: Southern Nuclear Operating Company  
Mr. P. H. Wells, Nuclear Plant General Manager  
SNC Document Management (R-Type A02.001)

U.S. Nuclear Regulatory Commission, Washington, D.C.  
Mr. L. N. Olshan, Project Manager - Hatch

U.S. Nuclear Regulatory Commission, Region II  
Mr. L. A. Reyes, Regional Administrator  
Mr. J. T. Munday, Senior Resident Inspector - Hatch

State of Georgia  
Mr. L. C. Barrett, Commissioner - Department of Natural Resources

Enclosure 2

Edwin I. Hatch Nuclear Plant - Unit 1  
Request to Revise Technical Specifications:  
Safety Limit Minimum Critical Power Ratios (SLMCPR)

10 CFR 50.92 Evaluation

In 10 CFR 50.92(c), the NRC provides the following standards to be used in determining the existence of a significant hazards consideration:

...a proposed amendment to an operating license for a facility licensed under §50.21(b) or §50.22 or for a testing facility involves no significant hazards consideration, if operation of the facility in accordance with the proposed amendment would not: (1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) Create the possibility of an accident of a new or different kind of accident from any accident previously evaluated; or (3) Involve a significant reduction in a margin of safety.

Southern Nuclear Operating Company has reviewed the proposed license amendment request and determined its adoption does not involve a significant hazards consideration based on the following discussion.

*Basis for no significant hazards consideration determination*

1. **The proposed Technical Specification changes do not involve a significant increase in the probability of an accident previously evaluated.**

The derivation of the revised SLMCPRs for Plant Hatch Unit 1 Cycle 19 for incorporation into the TS, and their use to determine cycle-specific thermal limits, have been performed using NRC-approved methods and procedures. The procedures incorporate cycle-specific parameters and reduced power distribution uncertainties in the determination of the lower value for SLMCPRs. These calculations do not change the method of operating the plant and have no effect on the probability of an accident initiating event or transient.

The basis of the MCPR Safety Limit is to ensure no mechanistic fuel damage is calculated to occur if the limit is not violated. The new SLMCPRs preserve the existing margin to transition boiling and the probability of fuel damage is not increased. Therefore, the proposed changes do not involve an increase in the probability or consequences of an accident previously evaluated.

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

The proposed changes result only from a revised method of analysis for the Unit 1 Cycle 19 core reload. These changes do not involve any new method for operating the facility and do not involve any facility modifications. No new initiating events or transients result from these changes. Therefore, the proposed TS changes do 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 SLMCPRs are calculated using NRC-approved methods and procedures which are in accordance with the current fuel design and licensing criteria. The SLMCPRs remain high enough to ensure that greater than 99.9% of all fuel rods in the core are expected to avoid transition boiling if the limit is not violated, thereby preserving the fuel cladding integrity.

Therefore, the proposed TS changes do not involve a reduction in the margin of safety.

The proposed changes have been reviewed and recommended for approval by the Plant Hatch Plant Review Board and reviewed by the Safety Review Board.

### **ENVIRONMENTAL IMPACT**

The proposed Technical Specification changes were reviewed against the criteria of 10 CFR 51.22 for environmental considerations. The proposed changes do not involve a significant hazards consideration, a significant increase in the amounts of effluents that may be released offsite, or a significant increase in individual or cumulative occupational radiation exposures. Based on the foregoing, Southern Nuclear Operating Company concludes the proposed Technical Specifications meet the criteria given in 10 CFR 51.22(c)(9) for a categorical exclusion from the requirements for an Environmental Impact Statement.

### **CONCLUSION**

Based on the evaluation above: (1) there is reasonable assurance 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 proposed amendment will not be inimical to the common defense and security or the health and safety of the public.

### **SCHEDULE OF CHANGE**

This amendment is scheduled to be implemented within 30 days after approval.