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R. P. McDonald
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the southern electric system

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May 19, 1988

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

PLANT VOGTLE - UNIT 1
NRC DOCKET 50-424
OPERATING LICENSE NPF-68
REQUEST TO REVISE TECHNICAL SPECIFICATIONS

Gentlemen:

In accordance with the provisions of 10 CFR 50.90 as required by 10 CFR 50.59(c)(1), Georgia Power Company (GPC) hereby proposes to amend the Vogtle Electric Generating Plant Unit 1 Technical Specifications, Appendix A to Operating License NPF-68.

It is GPC's objective to operate Plant Vogtle in the safest and most efficient manner possible. To achieve this objective, we are requesting Technical Specification changes to support more efficient fuel cycles. The requested changes fall into two categories: (1) positive moderator temperature coefficient (MTC); and (2) a change in shutdown margin requirements.

The first proposed change allows operation with a slightly positive MTC below 100% power. The current MTC Technical Specification requires a non-positive value at all power levels. The primary benefit of a positive MTC is the reduced burnable poison rods required to control peaking during the early portion of each cycle. A resultant benefit of the reduced burnable poison rods is the capability for longer fuel cycles. This is particularly important to GPC since the second operating cycle for Vogtle Unit 1 will be an 18 month cycle. Additionally, the reduced number of burnable poison rods will reduce handling requirements and the resultant problems associated with storage and disposal of spent burnable poison rods.

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The second category of changes concerns revisions to shutdown margin requirements as specified in Sections 3.1 and 3.5 of the Technical Specifications. Increases are proposed for the refueling water storage tank (RWST) and accumulator boron concentrations. The present limits are between 2000 and 2100 ppm for the RWST and between 1900 and 2100 ppm for the accumulators. The proposed limits are between 2400 and 2600 ppm for the RWST and between 1900 and 2600 ppm for the accumulators. As a result of planned core designs utilizing positive MTC and 18 month core loading patterns, the increased boron concentration is necessary to assure subcriticality requirements would be met following a postulated LOCA. Also proposed is an increase in the minimum RWST water volume requirement for Modes 5 and 6. Additional changes are proposed to the shutdown margin curves for Modes 3, 4, and 5, and the high flux at shutdown alarm setpoint. These changes are necessary to meet subcriticality requirements for boron dilution events.

Westinghouse has performed the necessary accident and transient evaluations and analyses to ensure that the results remain within all applicable design and safety criteria. The Westinghouse analysis, which is provided as Enclosure 1 to this letter, provides detailed descriptions of the proposed changes and their bases, and shows that the applicable design and safety criteria are met.

The effect of less negative MTCs on anticipated transient without scram (ATWS) mitigation is currently being evaluated by the Westinghouse Owners Group (WOG) in response to an NRC staff request. The WOG program was described in letter OG-88-08, dated March 4, 1988. GPC is a participant in the Owners Group effort and will take appropriate action to resolve any plant-specific issues which may arise.

Enclosure 2 details the basis for our determination that the proposed Technical Specification changes do not involve significant hazards considerations.

Enclosure 3 provides instructions for incorporation of the proposed amendment into the Technical Specifications. The proposed revised pages follow Enclosure 3.

In accordance with 10 CFR 170.12, a check in payment of the \$150.00 license amendment filing fee is enclosed.

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GPC requests approval of the proposed amendment by September 15, 1988. Future cycle designs, including Unit 1, Cycle 2, are dependent upon approval of the requested changes. If approval is not granted by September 15, 1988, the necessary action to redesign the core and secure the required burnable poison rods to meet the current Technical Specifications could become a critical path activity which could delay the scheduled restart of Unit 1. The Unit 1, end of Cycle 1 shutdown date is currently scheduled for September 19, 1988. In order to allow for orderly implementation of the changes during the refueling outage, we request that the amendment be issued with an allowable implementation period of 60 days following the date of issuance.

In accordance with 10 CFR 50.91, Mr. J. L. Ledbetter of the Environmental Protection Division of the Georgia Department of Natural Resources will be sent a copy of this letter and all applicable enclosures.


Mr. R. P. McDonald states that he is Executive Vice President of Georgia Power Company and is authorized to execute this oath on behalf of Georgia Power Company, and that to the best of his knowledge and belief, the facts set forth in this letter and enclosures are true.

GEORGIA POWER COMPANY

By: 

R. P. McDonald

Sworn to and subscribed before me this 19th day of May, 1988.


Notary Public

JH/lm

Notary Public, Fulton County, GA
My Commission Expires Feb. 23, 1991

Enclosures:

1. Positive Moderator Temperature Coefficient and RWST/Accumulator Boron Concentration Increase Licensing Report for VEGP Units 1 and 2.
2. 10 CFR 50.92 Evaluation
3. Instructions for Incorporation
4. Check for filing fee

c: (see next page)

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c: Georgia Power Company
Mr. P. D. Rice
Mr. G. Bockhold, Jr.
GO-NORMS

U. S. Nuclear Regulatory Commission
Dr. J. N. Grace, Regional Administrator
Mr. J. B. Hopkins, Licensing Project Manager, NRR (2 copies)
Mr. J. F. Rogge, Senior Resident Inspector-Operations, Vogtle