Georgia Power Company
333 Piedmont Avenue
Atlanta, Georgia 30308
Telephone 404 526-3195

Mailing Address
40 Inverness Center Parkway
Post Office Box 1295
Birmingham, Alabama 35201
Telephone 205 868-5086

J. D. Woodard
Senior Vice President

the southern electric system

October 1, 1996

Docket Nos. 50-321
50-366

HL-5243

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

Edwin I. Hatch Nuclear Plant
Response to NRC Bulletin 96-03

Gentlemen:

On May 6, 1996, the Nuclear Regulatory Commission (NRC) issued Bulletin (NRCB) 96-03, "Potential Plugging of Emergency Core Cooling Suction Strainers by Debris in Boiling Water Reactors" which requests licensees to take the following actions:

1. Implement appropriate procedural measures and plant modifications to minimize the potential for clogging of the Emergency Core Cooling System (ECCS) Suppression Pool Suction Strainers by debris that may be generated during a Loss of Coolant Accident (LOCA) by the end of the first refueling outage starting after January 1, 1997.

2. Provide a report within 180 days of the date of the bulletin describing the actions to be taken, the mitigative strategies to be used, and a schedule for implementation.

3. Within 30 days of completion of all requested actions, provide a report confirming completion and summarizing any actions taken.

NRCB 96-03 Discussion

NRCB 96-03 identifies debris sources as insulation and other debris which could be dislodged and transported to the suppression pool following a LOCA, and debris already in the pool from normal operation. This debris could then be deposited on the ECCS pump suction strainers, potentially reducing available NPSH and the water flow through the ECCS pumps.

NRCB 96-03 identified potential resolution options that could be implemented to ensure the capability of the ECCS to perform its safety function following a LOCA. These options are: 1) installation of a large capacity passive strainer design, 2) installation of a

IE73

self-cleaning strainer, 3) installation of a backflush system, or 4) alternative options proposed by the licensee that provide an equivalent level of assurance that the ECCS will perform its design function during a LOCA. Additionally, NRCB 96-03 requested utilities to incorporate new surveillance requirements for the proposed modifications in the plant technical specifications.

Georgia Power Company Response

The first refueling outages following January 1, 1997 are currently scheduled to begin in March, 1997 for Unit 2 and in October, 1997 for Unit 1. By letter dated August 30, 1996, Georgia Power Company (GPC) provided an initial response to NRCB 96-03, addressing the schedule for Unit 2. GPC determined that it is not feasible to implement the final resolution requested by NRCB 96-03 in the Spring, 1997 refueling outage and requested that the implementation on Unit 2 be extended until the Fall, 1998 refueling outage. The initial response also provided an overview of activities relative to the performance of passive ECCS strainers, a justification for the proposed schedule, and a discussion of compensatory measures for Unit 2. For Unit 1, GPC plans to implement the necessary modifications during the Fall 1997 refueling outage.

To develop the final resolution, GPC has evaluated the options identified in NRCB 96-03, and is participating in the Boiling Water Reactors Owners Group (BWROG) program to characterize debris generation and transport, and development of modifications. GPC has determined that installation of passive, large capacity pump suction strainers represents the most feasible modification. Both Unit 1 and Unit 2 have fibrous insulation, and reflective metallic insulation installed on piping in the drywell. GPC has performed evaluations and scoping studies based on available data and, as a result, is planning to install the new strainers on the core spray and residual heat removal system pump suction lines. GPC anticipates that the new strainers will be similar to those described in the BWROG Alternate Strainer Test Report. However, as significant industry efforts relative to this issue are progressing, new design options for passive strainers developed by the BWROG or industry are possible and they will also be evaluated.

GPC plans to use the analytical methodologies being developed by the BWROG as a guideline to determine the strainer size necessary to maintain the required net positive suction head when considering insulation debris generation, sludge material, and operational debris that could be expected to occur during a LOCA. GPC anticipates that these analytical methodologies will be reviewed by the NRC as part of the NRC staff's review of the Utility Resolution Guide under development by the BWROG. The final

design for Plant Hatch may require NRC review and approval for plant-specific aspects such as a reanalysis of hydrodynamic loads or unique design configurations.

Additionally, recent testing by the BWROG has shown that fibrous debris generation during a postulated LOCA may be reduced through the installation of improved jacket banding that incorporates modified latches. GPC has received a draft test report of the banding's performance and is currently evaluating the effectiveness of this banding in reducing the amount of insulation debris. The final design may incorporate the use improved banding or other methods to reduce debris generation.

NRCB 96-03 also requested utilities to incorporate a new surveillance requirement for the strainers into the technical specifications. GPC has recently impiemented The Improved Technical Specifications, which removed many of the previously included inspection surveillances and placed them into plant programs and procedures. Consequently, GPC does not plan on proposing an amendment to the technical specifications to incorporate a surveillance requirement for the strainers. Periodic inspection of the new strainers will be included in plant procedures.

Within 30 days of completion of the modifications and procedure changes on each Unit, GPC will provide a report summarizing the actions taken.

Sincerely,

J. D. Woodard

Sworn to and subscribed before me this 1st *day of* October, *1996.*

Notary Public

My Commission Expires: 9-14-98

JKB/ld

cc: See next page.

cc: *Georgia Power Company*
Mr. H. L. Sumner, Nuclear Plant General Manager
NORMS

U. S. Nuclear Regulatory Commission, Washington, D. C.
Mr. K. Jabbour, Licensing Project Manager - Hatch

U. S. Nuclear Regulatory Commission, Region II
Mr. S. D. Ebneter, Regional Administrator
Mr. B. L. Holbrook, Senior Resident Inspector - Hatch

State of Georgia
Mr. J. D. Tanner, Commissioner - Department of Natural Resources