Georgia Power Company
Route 2, Box 299A
Waynesboro, Georgia 30830
Telephone 404 554-9961
404 724-8114

Southern Company Services, Inc.
Post Office Box 2625
Birmingham, Alabama 35202
Telephone 205 870-6011

Vogtle Project

August 23, 1985

Director of Nuclear Reactor Regulation
Attention: Ms. Elinor G. Adensam, Chief
Licensing Branch #4
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

File: X7BC35
Log: GN-695

NRC DOCKET NUMBERS 50-424 AND 50-425
CONSTRUCTION PERMIT NUMBERS CPPR-108 AND CPPR-109
VOGTLE ELECTRIC GENERATING PLANT - UNITS 1 AND 2
SER CONFIRMATORY ITEM 5: GROUNDWATER MONITORING
SER CONFIRMATORY ITEM 8: CLAY MARL STRATUM

Dear Mr. Denton:

Enclosed for your staff's review is a copy of "Geotechnical Verification Work - Report of Results." This document was prepared to report our findings from the recently completed field and laboratory studies. In summary, these studies have verified previous findings on site characteristics:

- The core holes in the Blue Bluff marl have confirmed that the marl is a competent, firm, preconsolidated stratum, without voids or secondary openings.

- The permeability tests, both in situ and laboratory, verify that the marl is nearly impermeable.

- Additional observation wells, installed as part of this study, will allow acquisition of the data required by the "Ground Water Monitoring Program" submitted in June 1985.

- Preliminary water levels measured in these wells are consistent with previous results.

- The laboratory studies on cation exchange capacity and distribution coefficients for the backfill, have shown the previous assumptions for the accidental spill analysis to be conservative.

A001
1/4

This report should allow closure of confirmatory items listed in Sections 2.4 and 2.5 of the SER.

- Section 2.4.12.6 - Design Basis for Subsurface Hydrostatic Loading
  The additional wells installed in the water table aquifer during this study will provide the required data for the monitoring program.

- Section 2.4.12.7 - Ground Water Monitoring Program
  The program previously submitted to the staff has been implemented. Georgia Power Company is recording water levels in each aquifer on the schedule discussed in the program. The results, along with the site specific rainfall data, are being submitted to Bechtel geohydrologists for tabulation, technical review, and data management. This review includes a determination between the relationship of ground water levels to precipitation.

  The data will be submitted to NRC for review after the first six month reporting period at the end of 1985, without reduction in the monitoring frequency.

- Section 2.5.4.5 - Instrumentation and Monitoring
  This report provides the data on the six wells installed in the marl, the results of the in situ permeability testing, and detailed geologic logs of the core holes. NRC staff reviewers from hydrology and soils engineering visited the site to inspect marl core and well construction.

If your staff requires any additional information, please do not hesitate to contact me.

Sincerely,

J. A. Bailey
Project Licensing Manager

JAB/sm
Enclosure
xc: D. O. Foster
R. A. Thomas
J. E. Joiner, Esquire
B. W. Churchill, Esquire
M. A. Miller
B. Jones (w/o enclosure)
L. T. Gucwa
G. Bockhold, Jr.
T. Johnson (w/o enclosure)
D. C. Teper (w/o enclosure)
L. Fowler
W. C. Ramsey
Vogtle Project File

0112V