POR

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

December 7, 1984

Docket Nos: 50-424
and 50-425

APPLICANT: Georgia Power Company

FACILITY: Vogtle Electric Generating Plant, Units 1 & 2

SUBJECT: SUMMARY OF OCTOBER 3, 1984, MEETING REGARDING TRANSMISSION LINE CROSSING AT EBENEZER CREEK SWAMP - VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 & 2

On October 3, 1984, the NRC staff met in Bethesda, Maryland with Georgia Power Company (the applicant) to discuss plans for the right-of-way for the Vogtle/McIntosh portions of the Vogtle/Thalman transmission line which would span the Ebenezer Creek Swamp at a point approximately 2.5 miles north of the proposed Effingham (McIntosh) substation site and about 0.6 mile from the Savannah River. Ebenezer Creek Swamp, located about 5 miles southeast of Springfield, Georgia and 30 miles north of Savannah, Georgia, is the best remaining cypress-gum forest and biotic community in the Savannah River Basin. It is a unique virgin cypress forest and is habitat for numerous fish and wildlife species, reptiles and amphibians. This area is generally considered to be the most scenic blackwater stream in the southeast. The area has been designated by the U.S. Park Service as a National Natural Landmark and by the State of Georgia as a scenic river.

Meeting attendees are listed in Enclosure 1.

BACKGROUND

During a March 21-22, 1984, site visit, the NRC staff observed that the transmission line would cross the Ebenezer Creek Swamp area. As originally proposed (ER-OL Table 3.9-2), the line would have a 1471-foot span between 140-foot high towers, with a 150-foot wide clear-cut corridor across the Swamp. During subsequent telephone discussions, the NRC staff noted that this plan would have a detrimental and essentially irreversible environmental effect, and requested the applicant to provide an evaluation of the environmental impact of this routing, including an evaluation of possible mitigating actions for the planned route, and of alternative line routings to avoid the Landmark. The staff also requested that any clearing within the Landmark be deferred pending staff review.

The applicant responded on August 24, 1984, with a report on preliminary studies of alternatives and mitigative actions. This report considered alternatives for crossing Ebenezer Creek Swamp area, and included the approximate additional cost for two of these, designated alternatives A and B(shown on Enclosure 2). Alternative B would entirely avoid the landmark; alternative A would cross the landmark at its western boundary.

The August report also modified the proposed crossing plan, retaining the location of the line as originally proposed, but changing the "clear-cut" feature by substituting taller towers at closer intervals for the two towers closest to Ebenezer Creek. One of these two would be sited inside the landmark area, 480 feet north of the creek. The taller towers would span a 700-foot portion of the creek and swamp. A 25-foot minimum clearance would be maintained between the conductors and the tree tops by trimming trees as needed.

The U.S. Department of the Interior (Fish and Wildlife Service and the National Park Service) reviewed the impact of the alternative transmission line crossings on the National Natural Landmark and provided the results of its review by letters dated September 24 and 25, 1984. The Department of the Interior recommended that alternative A or B be selected.

By late September 1984, the applicant completed the evaluation for which preleminary results had been reported August 24, 1984, and requested the subject meeting with the NRC to describe the further modified proposal for crossing the Landmark and to provide more recent information regarding the alternatives.

SUMMARY

Based on further surveys within the Landmark to determine the extent and height of large cypress and tupelo gum stands, the applicant redesigned the proposed crossing in a manner to avoid locating a tower within these large stands. The applicant will build three 195-foot (165 feet to the conductor attachment) towers, one sited on a bluff on the south edge of Ebenezer Creek Swamp and the other 1475 feet north on the north edge of the large cypress and tupelo gum stands (station 124.00 which is 780 feet north of Ebenezer Creek) within the landmark. The third will be 1200 feet further north, outside of the National Natural Landmark area.

The use of these taller towers will result in conductor clearances sufficiently high that there will be no need to trim or cut any of the trees in the right-of-way, except for the small working area to be cleared for placement of the tower at station 124.00.

The base of the tower at station 124.00 will occupy an area of approximately 60 x 60 feet and a working area around the base measuring 100 x 100 feet is to be cleared to allow access during construction. The vegetation within the area to be cleared consists primarily of second growth bottomland hardwood. To minimize the area to be cleared, the tower will be constructed using a crane or a combination of crane and helicopter. Access to the tower construction area will be gained by selectively clearing a corridor no more than 20 feet wide along the right-of-way from Old Augusta Road to the tower site. In clearing of this corridor, larger trees within the right-of-way will be avoided. The applicant also stated that an old logging road from the Old Augusta Road to the right-of-way would be used to gain access to the tower construction area if permission could be obtained from the property owner.

During the construction of the tower and the associated corridor, the requirements of the U.S. Army Corp of Engineers (COE) for work in wetlands will be met. The applicant is required to obtain COE permits (1) to construct transmission lines pursuant to Section 404 of the Clean Waters Act of 1977 (33 CFR 323), and (2) to cross any navigable waterway used for interstate commerce (possibly applicable to Ebenezer Creek) pursuant to Section 10 of the River and Harbors Act of 1899 (33 CFR 322).

During the life of the project, any maintenance trimming of the trees within the landmark area necessary to maintain conductor clearance will be done by hand. The initial conductor clearance is such that 5 to 10 feet of growth would be required before any maintenance trimming would be needed. On the basis of the maturity of the trees in the landmark area, the applicant considers it unlikely that growth will be enough to require trimming.

The applicant also provided an updated evaluation of alternative A which would cross Ebenezer Creek parallel to an existing transmission line owned by another utility on the western boundary of the National Landmark. From the crossing to the proposed Effingham substation, the existing line is in close proximity to several houses. To route a 500-kV line parallel to the existing line would require purchasing those homes or going around them. Alternate A was thus found to result in much higher costs and more impact on the community, than was indicated by the preliminary study of August 24, 1984.

The applicant noted that no cultural sites exist near the proposed crossing, and no cultural studies have been performed for alternative routes.

The applicant will submit details of the presentation by letter to the NRC in about one week. Copies will also be forwarded to the Department of Interior, State of Georgia, and COE. The staff noted that its evaluation would be reflected in the DES scheduled for issuance by the end of October 1984.

Darl Hood

Darl S. Hood, Project Manager
Licensing Branch No. 4
Division of Licensing

Enclosures:
As stated

VOGTLE

Mr. Donald Foster
Vice President and Project General Manager
Georgia Power Company
P.O. Box 299A, Route 2
Waynesboro, GA 30830

cc: Mr. L. T. Gucwa
Chief Nuclear Engineer
Georgia Power Company
P.O. Box 4545
Atlanta, Georgia 30302

Mr. Ruble A. Thomas
Vice President - Licensing
Vogtle Project
Georgia Power Company/
Southern Company Services, Inc.
P.O. Box 2625
Birmingham, Alabama 35202

Mr. R. E. Conway
Senior Vice President - Nuclear
Power
Georgia Power Company
P.O. Box 4545
Atlanta, Georgia 30302

Mr. J. A. Bailey
Project Licensing Manager
Southern Company Services, Inc.
P.O. Box 2625
Birmingham, Alabama 35202

Ernest L. Blake, Jr.
Shaw, Pittman, Potts and Trowbridge
1800 M Street, N.W.
Washington, D. C. 20036

Mr. G. Bockhold, Jr.
Vogtle Plant Manager
Georgia Power Company
Route 2, Box 299-A
Waynesboro, Georgia 30830

Mr. James P. O'Reilly
Nuclear Regulatory Commission
Region II
101 Marietta Street, N.W., Suite 2900
Atlanta, Georgia 30323

Mr. William S. Sanders
Resident Inspector/Nuclear Regulatory
Commission
P.O. Box 572
Waynesboro, Georgia 30830

Deppish Kirkland, III, Counsel
Office of the Consumers' Utility
Council
Suite 225
32 Peachtree Street, N.W.
Atlanta, Georgia 30303

James E. Joiner
Troutman, Sanders, Lockerman,
& Ashmore
Candler Building
127 Peachtree Street, N.E.
Atlanta, Georgia 30303

Douglas C. Teper
Georgians Against Nuclear Energy
1253 Lenox Circle
Atlanta, Georgia 30306

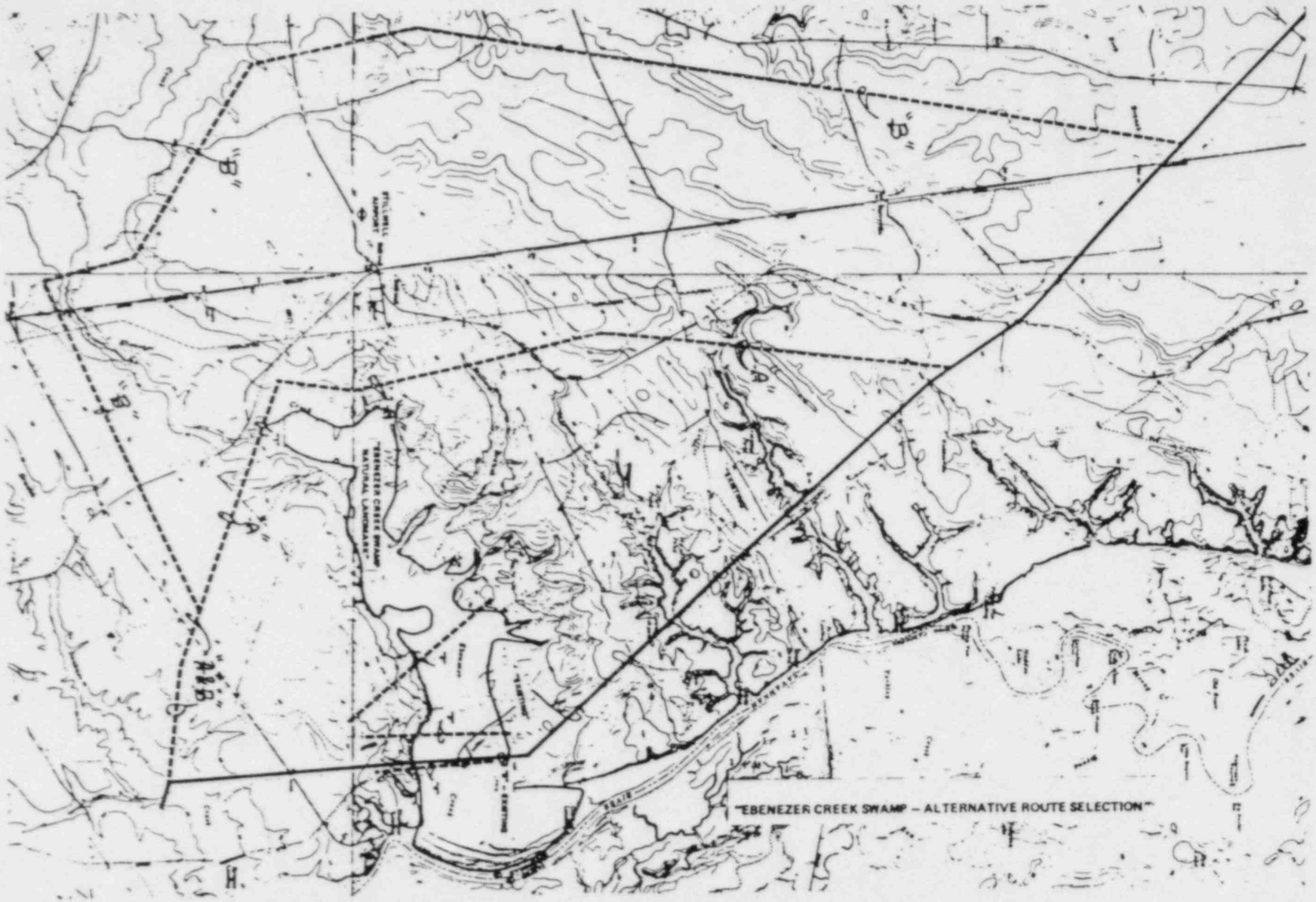
Laurie Fowler
Legal Environmental Assistance
Foundation
1102 Healy Building
Atlanta, Georgia 30303

Tim Johnson
Executive Director
Educational Campaign for
a Prosperous Georgia
175 Trinity Avenue, S.W.
Atlanta, GA 30303

ENCLOSURE 1

ATTENDEES
OCTOBER 3, 1984

NAME	ORGANIZATION
Darl S. Hood	LB 4/DL/NRR
Gerry LaRoche	NRR/DE/EHEB
Joseph Kane	NRR/DE/SGEB
Art Smith	GPC/Electrical Engin.
R. E. Gentry	Georgia Power Co./LAND
Jack Lawrence	Georgia Power Co./Construction
Willard Bowers	Southern Co. Services, Inc.
Robert B. Samworth	NRC/Environmental Engineering Section



Enclosure 2 _ Ebenezer Creek Swamp: alternate route selection