

11/29/78

OAK RIDGE NATIONAL LABORATORY

OPERATED BY
UNION CARBIDE CORPORATION
NUCLEAR DIVISION



POST OFFICE BOX X
OAK RIDGE, TENNESSEE 37830

November 15, 1978

50-395
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R. V. Watkins, Project Manager
Division of Site Safety
and Environmental Analysis
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Dick:

I have received additional information from South Carolina Electric and Gas Co. in response to the staff's concerns (reference: OL-ER, Response to Questions, related to Appendix 2C, Sect. 3.0) about the potential presence of proposed endangered or threatened plant species along the transmission corridors associated with the Virgil C. Summer Nuclear Station. These material include:

1. cover letter from Mark B. Whitaker (enclosed),
2. SCE&G internal memorandum and attachments to Mark B. Whitaker from J. H. Addison (enclosed),
3. aerial photographs showing engineering layout of SCE&G transmission lines to Graniteville, Denny-Terrace, and Pineland substations,
4. USGS topographic quadrangle maps with SCE&G transmission routes drawn, and
5. copies of aerial photographs and USGS maps illustrating routing of South Carolina Public Service Authority transmission lines to Newberry and Blythewood substations associated with the Summer station.

Items 3, 4, and 5 are loaned to the staff for evaluation and will be returned to the sender.

Sincerely,

Norman E. Hinkle

NEH:sb
Enclosure

cc: F. R. Mynatt

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E-11

SOUTH CAROLINA ELECTRIC & GAS COMPANY

Inter-Office Correspondence



Transmission Engineering

(Office)

Subject Transmission Line Inquiry
Terrestrial Survey - Plants

Date November 8, 1978

To Mr. Mark Whitaker

Attention of

According to our research, only one endangered plant specie may occur along SCE&GCO's (or Santee's) transmission line route. This is *hymenocallis coronaria*. This plant may exist along stream banks and rock islands in the vicinity of our lines in Richland County. The most apparent probable location is along Crane Creek and, in this area, there was extensive sewer construction prior to line construction. This activity probably disrupted those colonies that might have existed in this area. The only other areas where this plant may possibly be encountered would be at some of the stream crossings in Richland County (up to Little River).

There are nine (9) plant species on the list supplied that are identified as threatened. These are addressed as follows:

10. *Ptilimnium fluviatile* - There is a small possibility this plant may exist along the permanent few streams in northwest part of Aiken County (Piedmont Section).
11. *Ptilimnium nodosum* - According to our information, the lines do not go through the parts of Aiken County where this plant is expected to exist.
13. *Echinacea laevigata* - Due to the extensiveness of the habitat of this plant, there is a possibility it may exist along the line route.
18. *Sedum pusillum* - There is a remote possibility of some of this specie occurring along or near the right of way in those few areas where the line passes through or near an area with some rock outcropping or other exposed rocks.
24. *Quercus georgiana* - This tree, found along granite and sandstone ridges in the Piedmont, is not expected to be disturbed in Edgefield County since the line does not cross the type of land required by this specie. In Saluda County, there is only a slight possibility of there being a conflict between this specie and the line since parts of the line route go through areas of this county which do not have the characteristics described.

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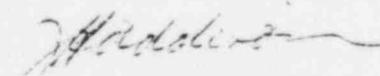
November 8, 1978

26. Isoetes melanospora - There is a slight possibility of this plant being found along some streams in parts of Richland, Saluda and Edgefield Counties.
40. Waldsteinia lobata - There is a slight chance this plant may be found in the vicinity of the line in Edgefield County and a lesser chance in Aiken County since the line route in Edgefield County is in the Piedmont whereas only small portions of it are in the Piedmont, in Aiken County.
41. Nestronia unbellula - There is a possibility this plant may be found along portions of the line route in the upper (northwest) portion of Richland County where it would be a parasite on some of the bottom hardwoods.
42. Sarracenia rubra - This plant is probably unaffected by lines in Richland County since its desired habitat is not impacted by these lines. In Saluda County there is a slight possibility of an effect in the vicinity of the lowlands associated with the upper reaches of Lake Murray, a man-made lake.

In the maintenance of these lines, it is SCE&GCO's policy not to spray any herbicide in or adjacent to any waterways, water courses and similar wet areas. All such areas are normally cleared by hand as needed. This will tend to minimize the effects, if any, on these plant species.

The above covers all lines for SCE&GCO's and all rights-of-way under its control. It does not cover SCPSA's lines after they leave our common rights-of-way.

If you have any questions, please give me a call.


J. H. Addison

jf

enclosures

Out of the 43 species listed as proposed threatened and endangered in South Carolina, the ones listed below have a possibility of occurring on the South Carolina Electric and Gas Company's right-of-way on the lines coming out of Summer Nuclear Station and terminating at their respective substations. The species not listed have been researched and are not expected to be affected.

7. Hymenocallis coronaria - Possibility of being found in Richland County. Commonly called the spider lilly, this plant can be found in brakish marshes, low woods, and swamp forest borders. Other areas it may be found are along stream banks and rock islands. Found mostly above fall line.
10. Ptilimnium fluviatile - Possibility of being found in Aiken County. This plant is found in rocky beds of streams.
11. Ptilimnium nodosum - Possibility of being found in Aiken County. This plant is found in shallow ponds along the Coastal Plain.
13. Echinacea laevigata - Possibility of being found in Aiken County. Commonly called the purple cone flower, this plant is found in meadows and woodlands in the Piedmont.
18. Sedum pusillum - Possibility of being found in Fairfield and Edgefield Counties. This plant is found in and around granite rocks in the Piedmont.

24. Quercus georgiana - Possibility of being found in Edgefield and Saluda Counties. This tree is found in granite and sandstone ridges in the Piedmont.
26. Isoetes melanospora - Possibility of being found in Richland, Saluda, and Edgefield Counties. This plant is most likely to be found in temporary ponds on granite, low wet fields and edges of sluggish streams in the Piedmont and Coastal Plains.
40. Waldsteinia lobate - Possibility of being found in Aiken and Edgefield Counties. This plant is most likely to be found along stream banks and river banks in the Piedmont and Coastal Plain.
41. Nestronia umbellula - Possibility of being found in Richland County. This plant is most likely to be found in woods and along stream banks in the Piedmont and Appalachian plateau. This plant is parasitic on deciduous trees and shrubs.
42. Sarracenia rubra - Possibility of being found in Richland and Saluda Counties. This plant is most likely to be found in bogs and low pinelands on the Coastal Plain and adjacent Piedmont.

PROPOSED THREATENED AND ENDANGERED SPECIES
WHICH OCCUR IN RICHLAND AND NEWBERRY COUNTIES OF SOUTH CAROLINA

Endangered

1. Hymenocallis coronaria - There is a slight possibility of existence of this endangered species in the Richland County along Harmon Creek and Little Horse Branch, which is being crossed by Summer-Blythewood 230 Kv Line (Section II). This kind of specie exists along stream banks, Rock Island, Shoals, Coastal Plain, and adjacent Piedmont. Because of the construction techniques used, it is possible any of the species existing in the area will not be destroyed.

Threatened

1. Isoetes melanospora - This kind of specie exist along temporary ponds, granite area, low wet fields, edge of wet fields, edge of sluggish streams. There is a slight possibility of existence of this specie.
2. Nestronia umbellula - This kind of specie can be found in woods and stream banks, Piedmont to Appalachian plateaus, parasitic on deciduous trees and shrubs. The possibility of existence of this specie is significant.
3. Sarracenia rubra - This exist along boggy pine lands, coastal plains and adjacent Piedmont. The possibility of existence is remote.