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June 25, 2010

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Duke Energy Carolinas, LLC
William States Lee III Nuclear Station - Docket Nos. 52-018 and 52-019
AP1000 Combined License Application for the
William States Lee III Nuclear Station Units 1 and 2
Response to Request for Additional Information
Ltr# WLG2010.06.06

Reference: Letter from Sarah Lopas (NRC) to Bryan Dolan (Duke Energy), Request
for Additional Information Regarding the Environmental Review of the
Combined License Application for William States Lee III Nuclear Station,
Units 1 and 2, dated June 22, 2010.

This letter provides the Duke Energy responses to the Nuclear Regulatory
Commission's requests for additional information (RAIs) included in the referenced
letter.

RAI 136, Cultural Resources
RAI 146, Aquatic Ecology
RAI 152, Aquatic Ecology
RAI 153, Terrestrial Ecology
RAI 175, Terrestrial Ecology

RAI 178, Terrestrial Ecology
RAI 179, Terrestrial Ecology
RAI 184, Terrestrial Ecology
RAI 188, Groundwater Hydrology
RAI 194, Land Use

The responses to the NRC information request described in the referenced letter are
addressed in separate enclosures, which also identify associated changes to the
Combined License Application for the Lee Nuclear Station, when appropriate.

If you have any questions or need any additional information, please contact Peter S.
Hastings, Nuclear Plant Development Licensing Manager, at 980-373-7820.

Bryan J. Dolan
Vice President
Nuclear Plant Development

D093
NRC

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June 25, 2010

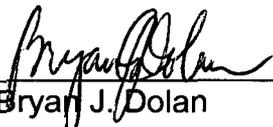
Page 2 of 4

Enclosures:

- 1) Response to ER RAI 136, Cultural Resources
- 2) Response to ER RAI 146, Aquatic Ecology
Response to ER RAI 184, Terrestrial Ecology
- 3) Response to ER RAI 152, Aquatic Ecology
Response to ER RAI 153, Terrestrial Ecology
Response to ER RAI 175, Terrestrial Ecology
Response to ER RAI 188, Groundwater Hydrology
- 4) Response to ER RAI 178, Terrestrial Ecology
- 5) Response to ER RAI 179, Terrestrial Ecology
- 6) Response to ER RAI 194, Land Use

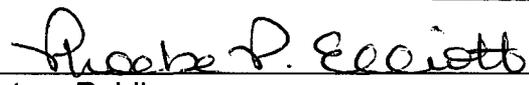
AFFIDAVIT OF BRYAN J. DOLAN

Bryan J. Dolan, being duly sworn, states that he is Vice President, Nuclear Plant Development, Duke Energy Carolinas, LLC, that he is authorized on the part of said Company to sign and file with the U. S. Nuclear Regulatory Commission this supplement to the combined license application for the William States Lee III Nuclear Station and that all the matter and facts set forth herein are true and correct to the best of his knowledge.



Bryan J. Dolan

Subscribed and sworn to me on June 25, 2010



Notary Public

My commission expires: June 26, 2011



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June 25, 2010
Page 4 of 4

xc (w/o enclosures):

Loren Plisco, Deputy Regional Administrator, Region II
Jeffrey Cruz, Branch Chief, DNRL
Robert Schaaf, Branch Chief, DSER

xc (w/ enclosures):

Sarah Lopas, Project Manager, DSER
Brian Hughes, Senior Project Manager, DNRL

Duke Letter Dated: June 25, 2010

Lee Nuclear Station Response to Request for Additional Information (RAI)

RAI Letter Dated: June 22, 2010

Reference NRC RAI Number: ER RAI 136, Cultural Resources

NRC RAI:

Provide clarification on why the proposed historic district would not be indirectly impacted visually by Pond C dam, inundation, and associated activities. Provide clarification on whether the Phase 1 cultural resources survey for Pond C considered indirect effects, such as visual impacts, to the Cherokee Falls Mill Potential Historic District.

Duke Energy Response:

The SC State Historic Preservation Office (SHPO) review and concurrence with the Make-Up Pond C cultural resource study is provided as an attachment to this response. The SC SHPO determined that the Cherokee Falls Mills Village is not eligible for listing in the National Register of Historic Places. Consequently, indirect effects do not need to be evaluated.

Associated Revisions to the Lee Nuclear Station Combined License Application:

None

Attachments:

Attachment ER RAI 136-1 Wilson, C.D. (SC SHPO), 2010, Letter to J. Fletcher, Cultural Resources Survey of the Proposed London Creek Reservoir (Make-Up Pond C), Water Pipeline, Railroad Corridor, Transmission Line, SC 329 Realignment, Railroad Culvert, Water Pipeline Additions, Spoil Areas and Road Widening, May 18, 2010

Attachment ER RAI 136-1

Wilson, C.D. (SC SHPO), 2010, Letter to J. Fletcher, Cultural Resources Survey of the Proposed London Creek Reservoir (Make-Up Pond C), Water Pipeline, Railroad Corridor, Transmission Line, SC 329 Realignment, Railroad Culvert, Water Pipeline Additions, Spoil Areas and Road Widening, May 18, 2010

May 18, 2010



Josh Fletcher
Brockington & Associates
498 Wando Park Boulevard, Suite 700
Mt. Pleasant, South Carolina 29464

Re: Cultural Resources Survey of the Proposed London Creek Reservoir (Make-up Pond C),
Water Pipeline, Railroad Corridor, Transmission Line, SC 329 Realignment, Railroad
Culvert, Water Pipeline Additions, Spoil Areas, and Road Widening
Cherokee County, SC
SHPO #: 09CW0462

Dear Mr. Fletcher:

Thank you for the draft report which we received on April 15, regarding the above referenced project. The State Historic Preservation Office is providing comments to the Federal Energy Regulatory Commission pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR 800.

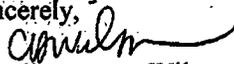
Based on the description of the Area of Potential Effect (APE) for the project and the identification of historic properties within the APE, SHPO concurs with the assessment that no historical properties listed in or eligible for listing in the National Register of Historic Places will be adversely affected by this project. Also, SHPO concurs with the recommendation for the plans to relocate the Service Family Cemetery (38CK142).

Our office is reviewed the eligibility of the Cherokee Falls Mill Village, as proposed in the survey. We have determined that the village is not eligible for listing on the National Register of Historic Places.

If archaeological materials are encountered during construction, the procedures codified at 36 CFR 800.13(b) will apply. Archaeological materials consist of any items, fifty years old or older, which were made or used by man. These items include, but are not limited to, stone projectile points (arrowheads), ceramic sherds, bricks, worked wood, bone and stone, metal and glass objects, and human skeletal materials. The federal agency or the applicant receiving federal assistance should contact our office immediately.

If you have any questions, please contact me at (803) 896-6169 or cwilson@scdah.state.sc.us.

Sincerely,


Caroline Dover Wilson
Review and Compliance Coordinator
State Historic Preservation Office

Lee Nuclear Station Response to Request for Additional Information (RAI)

RAI Letter Dated: June 22, 2010

**Reference NRC RAI Numbers: ER RAI 146, Aquatic Ecology,
 ER RAI 184 Terrestrial Ecology**

NRC RAIs:

- 146 Provide the mitigation plans developed in conjunction with the federal and state permitting agencies as they are completed.
- 184 Provide mitigation plans, including those developed in conjunction with State and/or Federal agencies, for the loss of rare, unique, or otherwise valuable terrestrial habitats as a result of creating Pond C.

Duke Energy Response:

Conceptual mitigation plans are generally provided as part of the 404 permit application to the U.S. Army Corps of Engineers. Mitigation plans are not finalized until the 404 permit is issued. Consequently, Duke Energy does not have mitigation plans at this time. Duke Energy plans to submit the 404 permit application once the NRC issues the Draft Environmental Impact Statement.

Associated Revisions to the Lee Nuclear Station Combined License Application:

None

Attachments:

None

Lee Nuclear Station Response to Request for Additional Information (RAI)

RAI Letter Dated: June 22, 2010

Reference NRC RAI Numbers: ER RAI 152, Aquatic Ecology; ER RAI 153, Terrestrial Ecology; ER RAI 175, Terrestrial Ecology; ER RAI 188, Hydrology-Ground Water

NRC RAIs:

- 152 Provide copies of consultation letters and agreed-upon pre-operational/operational monitoring plans related to the aquatic environment as they become available.
- 153 Provide documentations of plans and commitments for pre-application, preoperational, and operational monitoring related to the aquatic environment.
- 175 Describe what plans or commitments Duke Energy has for pre- and post-operational monitoring for Pond C.
- 188 Provide a description of monitoring of surface water in Pond C and nearby groundwater that would be performed to detect and quantify changes in water quality associated with the filling of the new impoundment.

Duke Energy Response:

As noted in Environmental Report Chapter 6, water quality and ecological monitoring will be in accordance with any requirements of environmental permits. Duke Energy has not received any permits associated with the construction or operation of the Lee Nuclear Station. Consequently, Duke Energy does not currently have plans for pre-operational or operational water quality or ecological monitoring.

Associated Revisions to the Lee Nuclear Station Combined License Application:

None

Attachments:

None

Lee Nuclear Station Response to Request for Additional Information (RAI)

RAI Letter Dated: June 22, 2010

Reference NRC RAI Numbers: ER RAI 178, Terrestrial Ecology

NRC RAI:

Provide the addendum report to the 230 kV and 525 kV Transmission Line Ecological Survey Report (ML092710484) that addresses the additional surveys and results for Schweinitz's sunflower and state and federal plant species of concern.

Duke Energy Response:

The requested report is provided as Attachment 178-1.

Associated Revisions to the Lee Nuclear Station Combined License Application:

None

Attachment:

Attachment 178-1 Gaddy, L.L., 2010, Inventory of Endangered, Threatened, and Otherwise Noteworthy Vascular Plants on Two Proposed Transmission Right-of-Way Routes in Cherokee and Union Counties, South Carolina, April 2010

Attachment 178-1

Gaddy, L.L., 2010, Inventory of Endangered, Threatened, and Otherwise Noteworthy Vascular Plants on Two Proposed Transmission Right-of-Way Routes in Cherokee and Union Counties, South Carolina, April 2010

**INVENTORY OF
ENDANGERED, THREATENED, AND OTHERWISE NOTEWORTHY
VASCULAR PLANTS
On
TWO PROPOSED TRANSMISSION RIGHT-OF-WAY ROUTES
In
CHEROKEE AND UNION COUNTIES, SOUTH CAROLINA**



Mature beech trees on rich wildflower slope overlooking Abingdon Creek.

by
L.L. Gaddy
terra incognita
125 South Edisto Avenue
Columbia, South Carolina 29205

for
HDR/DTA
Charlotte, North Carolina

April 2010

INTRODUCTION

This report presents the findings of field surveys for endangered, threatened, and otherwise noteworthy vascular plant species on two proposed right-of-way routes terminating at the proposed Lee Nuclear Station in Cherokee County, South Carolina. Both routes will travel north from an existing transmission line/corridor in northern Union County, cross the Pacolet River and Thicketty Creek and then terminate at the proposed Lee Nuclear Station. The proposed East Route stays close the Broad River and passes through the Abingdon Community, while the proposed West Route passes west of Saratt and Wilkinsville and then angles back to the proposed Lee Nuclear Station.

METHODS

Before fieldwork was begun in August of 2009, a table of endangered, threatened, and otherwise noteworthy (of concern nationally, regionally, or statewide) vascular plants known from Cherokee, York (the county just east of the Broad River), and Union Counties was compiled from existing South Carolina Department of Natural Resources and United States Fish and Wildlife Service data (Table 1). This table of over 50 species served as a working table of species that potentially-occurred on the two lines.

After a review of false color infrared imagery of the proposed lines and habitats therein, it was determined that for 14 of these species no habitat existed along the proposed rights-of-way (see Table 1). [Among these 14 species were granitic flatrock species, such as the federally-listed (threatened) pool sprite (*Amphianthus pusillus*). Only one granitic flatrock, however, was found in the general area of the proposed lines and it was over one-fourth mile from the proposed West Route.] As many as 25 species in Table 1 were “Piedmont prairie” species—plants found in open, clayey, prairie-like soils (Mecklenburg and Iredell soils) primarily in York County.

Due to the large number of Piedmont prairie species in Table 1, a review of all occurrences of Mecklenburg and Iredell soil types along the two proposed routes was undertaken in July and August of 2009. All areas of known Mecklenburg and Iredell soils were mapped on false color infrared images of the both the proposed routes. In the field, non-forested areas along the two proposed routes that occurred on these two soils types were inspected. These sites were searched in August of 2009, for the possible presence of the federally-listed (endangered) Schweinitz’s sunflower (*Helianthus schweinitzii*) and state-listed species occupying similar habitats (Table 1).

Table 1. State- and federally-listed and otherwise noteworthy plant species known from Cherokee, York, and Union Counties, South Carolina.

SCIENTIFIC NAME	COMMON NAME	DATA SOURCE*	FEDERAL STATUS**	STATE STATUS**	HABITAT PRESENT IN POWER LINE STUDY AREAS?	SPECIES PRESENT IN POWER LINE STUDY AREAS?
<i>Agalinis auriculata</i>	ear-leaved foxglove	YORK	--	SC	NO	NO
<i>Agrimonia pubescens</i>	soft groovebur	YORK	--	SC	YES	NO
<i>Allium cernuum</i>	nodding onion	CHEROKEE	--	SC	YES	NO
<i>Amorpha schwerinii</i>	Schwerin's indigobush	UNION	--	SC	NO	NO
<i>Amphianthus pusillus</i>	pool sprite	YORK	FT	ST	NO	NO
<i>Aster georgianus</i> (= <i>Symphotrichum georgianum</i>)	Georgia aster	CHEROKEE AND YORK	FC	SC	YES	NO
<i>Aster laevis</i>	smooth blue aster	YORK	--	SC	NO	NO
<i>Camassia scilloides</i>	wild hyacinth	YORK	--	RC	NO	NO
<i>Carex prasina</i>	drooping sedge	FIELD SURVEY/ UNION	--	SC	YES	NO
<i>Carex scabrata</i>	rough sedge	CHEROKEE	--	SC	YES	NO
<i>Circaea lutetiana ssp. canadensis</i>	southern enchanter's nightshade	FIELD SURVEY	--	SC	YES	NO
<i>Cyperus granitophilus</i>	granite-loving flatsedge	YORK	--	SC	NO	NO
<i>Dasistoma macrophylla</i>	mullein foxglove	YORK	--	SC	NO	NO
<i>Eleocharis palustris</i>	creeping spikerush	YORK	--	SC	NO	NO
<i>Eupatorium sessilifolium</i> var. <i>vaseyi</i>	Vasey's dogfennel	CHEROKEE	--	SC	NO	NO
<i>Hackelia virginiana</i>	Virginia stickseed	UNION	--	SC	NO	NO
<i>Helianthus laevigatus</i>	smooth sunflower	CHEROKEE AND YORK	--	SC	YES	NO
<i>Helianthus schweinitzii</i>	Schweinitz's sunflower	YORK	FE	SE	NO	NO
<i>Hexastylis naniflora</i>	dwarf-flowered heartleaf	CHEROKEE	FT	ST	YES	NO
<i>Hydrangea cinerea</i>	ashy hydrangea	CHEROKEE	--	SC	NO	
<i>Hymenocallis coronaria</i>	shoals spider-lily	YORK	--	NC	NO	NO
<i>Isoetes piedmontana</i>	Piedmont quillwort	YORK	--	SC	NO	NO
<i>Juglans cinerea</i>	white walnut	YORK	--	SC	YES	NO
<i>Juncus georgianus</i>	Georgia rush	YORK	--	SC	NO	NO
<i>Lilium canadense</i>	Canada lily	YORK	--	SC	NO	NO
<i>Lipocarpa micrantha</i>	dwarf bulrush	YORK	--	SC	NO	NO
<i>Lotus purshianus</i> var. <i>helleri</i>	prairie birdsfoot-trefoil	USFWS	FSC	NL	NO	NO
<i>Melanthium virginicum</i>	Virginia bunchflower	YORK	--	SC	YES	NO

SCIENTIFIC NAME	COMMON NAME	DATA SOURCE*	FEDERAL STATUS**	STATE STATUS**	HABITAT PRESENT IN POWER LINE CORRIDORS?	SPECIES PRESENT IN POWER LINE CORRIDORS?
<i>Menispermum canadense</i>	Canada moonseed	CHEROKEE	--	--	YES	NO
<i>Monotropis odorata</i>	sweet pinesap	UNION	--	RC	YES	NO
<i>Minuartia uniflora</i>	one-flowered stitchwort	YORK	--	SC	NO	NO
<i>Najas flexilis</i>	slender naiad	YORK	--	SC	NO	NO
<i>Ophioglossum vulgatum</i>	southern adder's tongue fern	FIELD SURVEY	--	SC	YES	YES
<i>Orobancha uniflora</i>	single-flowered cancer root	FIELD SURVEY	--	SC	YES	NO
<i>Panax quinquefolius</i>	American ginseng	YORK	--	RC	YES	NO
<i>Poa alsodes</i>	blue grass	YORK	--	SC	NO	NO
<i>Quercus bicolor</i>	swamp white oak	YORK	--	SC	NO	NO
<i>Quercus oglethorpensis</i>	Oglethorpe oak	YORK	--	SC	NO	NO
<i>Ranunculus fascicularis</i>	early buttercup	YORK	--	SC	NO	NO
<i>Ratibida pinnata</i>	gray-headed prairie coneflower	YORK	--	SC	NO	NO
<i>Rhododendron eastmanii</i>	Creel's azalea	YORK	--	SC	YES	NO
<i>Rudbeckia heliopsisidis</i>	sun-facing coneflower	YORK	--	NC	NO	NO
<i>Scutellaria parvula</i>	dwarf skullcap	YORK	--	SC	NO	NO
<i>Sedum pusillum</i>	granite rock stonecrop	UNION	--	SC	NO	NO
<i>Silphium terebinthinaceum</i>	prairie rosinweed	YORK	--	SC	NO	NO
<i>Solidago ptarmicoides</i>	prairie goldenrod	YORK	--	SC	NO	NO
<i>Solidago rigida</i>	rigid prairie goldenrod	YORK	--	SC	NO	NO
<i>Smilax biltmoreana</i>	Biltmore greenbrier	USFWS	--	SC	YES	NO
<i>Thermopsis mollis</i>	soft-haired thermopsis	CHEROKEE	--	SC	NO	NO
<i>Tiarella cordifolia</i> var. <i>cordifolia</i>	heart-leaved foamflower	YORK	--	SC	NO	NO
<i>Torreyochloa pallida</i>	Pale manna grass	YORK	--	SC	NO	NO
<i>Trillium rugelii</i>	southern nodding trillium	YORK	--	SC	YES	NO
<i>Verbena simplex</i>	narrow-leaved vervain	YORK	--	SC	NO	NO
<i>Veronicastrum virginicum</i>	culver's-root	YORK	--	SC	NO	NO
<i>Xerophyllum asphodeloides</i>	turkey-beard	CHEROKEE	--	SC	NO	NO

***DATA SOURCE:** YORK-SCDNR York County list; CHEROKEE-SCDNR Cherokee County list; UNION-SCDNR Union County list; USFWS-U. S. Fish and Wildlife Service; FIELD SURVEY-found during field inventories of Lee Nuclear Station and Make Up Pond C (London Creek) sites.

****ABBREVIATIONS:** FT-federally-listed, threatened; FC-federal candidate, not yet listed; ST-state-listed, threatened; NC-state-listed, of national concern; RC-state-listed, of regional concern; SC-state-listed, of state concern; NL-not listed.

In October of 2009, field searches for the federal candidate species Georgia aster [*Symphotrichum georgianum* (= *Aster georgianus*)] and the smooth sunflower (*Helianthus laevigatus*) were carried out. Georgia aster is known from disturbed power line rights-of-way north of the proposed Lee Nuclear Station, and smooth sunflower is known from several sites in the Kings Mountain Belt northwest of the proposed Lee Nuclear Site. To get a better search image for both species, known populations of the two plants were visited during the field inventories. Because both Georgia aster and smooth sunflower are also known to occur in a range of calcium-rich clayey, disturbed soil types on power line rights-of-way and road margins, areas where the two proposed routes crossed roads and other disturbed areas were inspected, as well as the previously-visited Mecklenburg/Iredell soil sites on the two routes.

The remaining species listed in Table 1 were spring-blooming plants found primarily in rich, mixed hardwood stands on bluffs and in ravines and coves. Again, potential sites for these species were marked on false color infrared images. Fieldwork for these species was conducted in March and April of 2010. About 10 sites were examined on each proposed route.

FINDINGS

No federally-listed vascular plant species were found on the two proposed routes during any of the three field survey seasons—August of 2009, October of 2009, and March and April of 2010. No state-listed vascular plant species were found during the August, 2009 and October, 2009 field inventories. Only one state-listed species—adder's-tongue fern (*Ophioglossum vulgatum*), a rich-site diminutive fern listed as “state concern” by South Carolina Department of Natural Resources (www.dnr.sc.gov) was found in the spring 2010 inventory. This species is considered as “state concern” by South Carolina Department of Natural Resources, but is not protected by the federal government or South Carolina state agency, therefore no actions are required. It was found at three sites—two sites along the East Route and one site along the West Route (see attached maps).

Additionally, nerveless sedge (*Carex leptonevia*), a rare mesic-site species not reported in South Carolina by the South Carolina Plant Atlas (<http://cricket.biol.sc.edu>) (but see Bryson and Naczi, 2002) nor listed by South Carolina Department of Natural Resources (SCDNR) as noteworthy, was found to be common at one site (see attached map of Abingdon Creek site on East Route). This species is not protected by the federal government or North or South Carolina state agencies, therefore no actions are required.

No noteworthy habitats for rare plant species were found during the 2009 inventories. Neither of the proposed routes harbored any Piedmont prairie nor granitic flatrock habitat. One noteworthy site, however, was found during the 2010 spring fieldwork. A species-rich, mixed hardwood bluff was found on Abingdon Creek on the proposed East Route. It was dominated by an American beech (*Fagus grandifolia*)-Florida maple (*Acer barbatum*) canopy with an herbaceous layer of rich, piedmontane and montane cove plant species, including the state-listed adder's tongue fern and nerveless sedge. Only a small

portion of this community is located within the right-of-way and with no protected species located within this area, any impacts to this community will not require permitting or notification to any state or federal agency. A description of the site with a species list is included in the Appendix.

LITERATURE CITED

Bryson, C. T. and R. F. C. Naczi. 2002. *Carex*, p. 435 in *Flora of North America*. Oxford University Press, Oxford, New York.

Integrated Taxonomic Information System. 2010. www.itis.gov.

Radford, A. E., H. E. Ahles, and C. R. Bell. 1968. *Manual of the flora of the Carolinas*. University of North Carolina Press, Chapel Hill. 1184 p.

South Carolina Department of Natural Resources. 2010. www.dnr.sc.gov.

APPENDIX

Abingdon Creek Bluffs

Dominant Species

Canopy [dbh=diameter at breast (4.5 feet) height]

Fagus grandifolia (American beech) (10 to 38 inches in dbh)

Acer barbatum (Florida maple) (10 to 16 inches in dbh)

Liriodendron tulipifera (tulip poplar) (10 to 28 inches in dbh)

Fraxinus americana (white ash) (10 to 16 inches in dbh)

Liquidambar styraciflua (sweet gum) (10 to 20 inches in dbh)

Ulmus alata (winged elm) (10 to 14 inches in dbh)

Understory

Cornus florida (dogwood)

Aesculus flava (yellow buckeye)

Carpinus caroliniana (ironwood)

Shrub Layer

Open

Herbaceous Layer

Acer barbatum (Florida maple) seedlings

Cardamine concatenata (lace-leaved toothwort)

Claytonia virginica (spring beauty)

Geranium maculatum (wild geranium)

Podophyllum peltatum (mayapple)

Trillium cuneatum (sweet betsy)

SPECIES LIST/VASCULAR PLANTS

Abingdon Creek Bluffs

LEGEND

ALL CAPS—species listed by U. S. Department of Interior, Fish and Wildlife Service or South Carolina Natural Heritage Program as endangered or threatened.

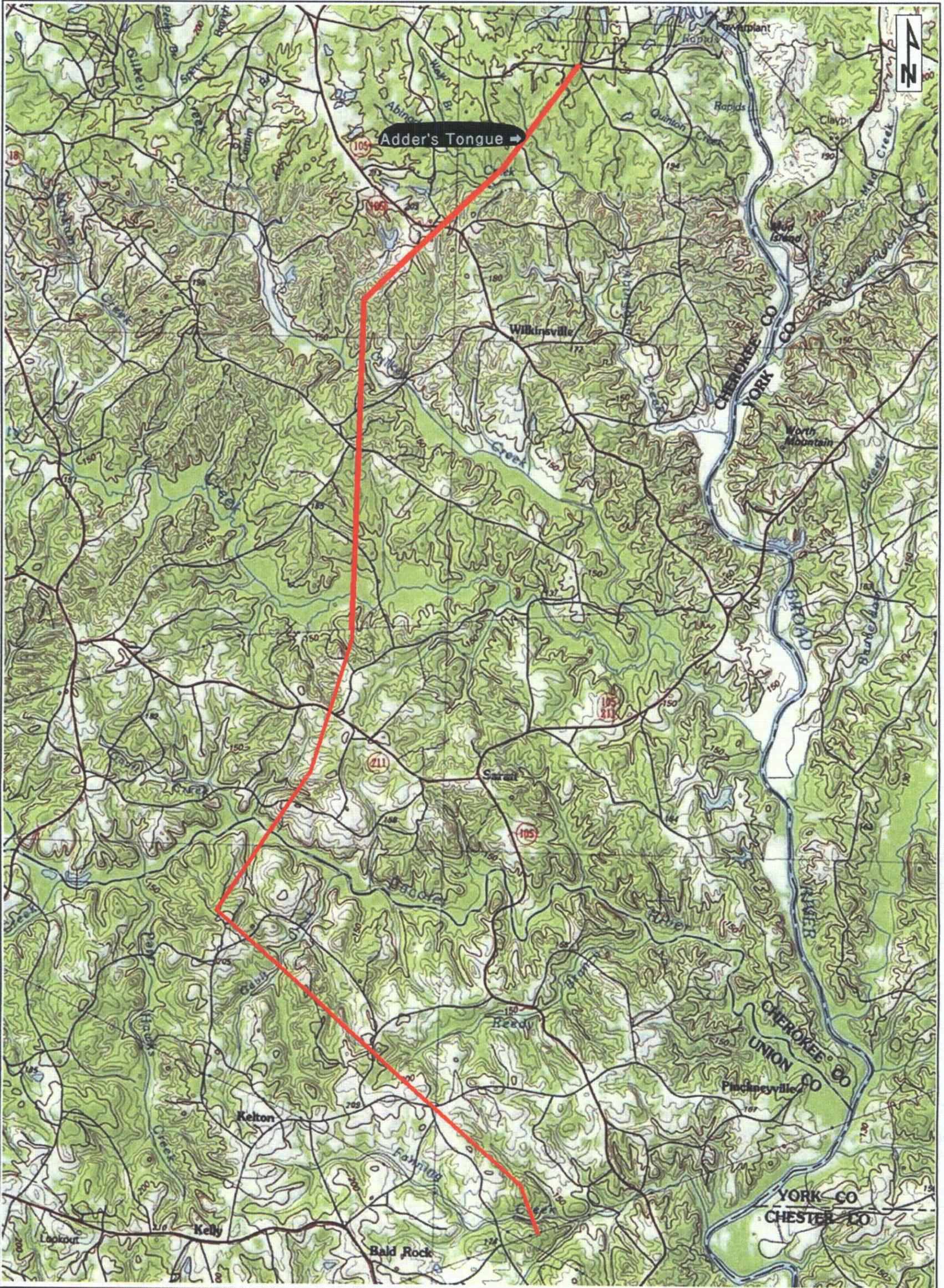
Exotic, introduced, or invasive species in italics.

Taxonomy based on Radford et al. (1968) unless otherwise noted; common names from Radford et al. (1968) and www.itis.gov.

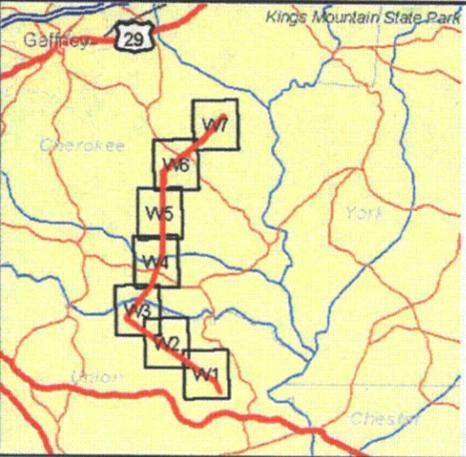
Acer barbatum (Florida maple)	Juniperus virginiana (eastern red cedar)
Acer leucoderme (chalk maple)	Krigia dandelion (tuberous dwarf-dandelion)
Acer negundo (box elder)	Leersia virginica (Virginia cutgrass)
Acer rubrum (red maple)	<i>Lespedeza bicolor (bicolor lespedeza)</i>
Ageratina altissima (milksick weed)	<i>Lespedeza cuneatum (sericea)</i>
Alnus serrulata (tag alder)	Leucothoe fontanesiana (dog-hobble)
Amelanchier arborea (service berry)	<i>Ligustrum sinense (Chinese privet)</i>
Amphicarpaea bracteata (hog peanut)	Lindera benzoin (spicebush)
Andropogon virginicus (broomsedge)	Liquidambar styraciflua (sweet gum)
Antennaria plantaginifolia (plantain-leaved pussy-toes)	Liriodendron tulipifera (tulip poplar)
Arisaema triphyllum (Jack-in-the-pulpit)	Lobelia sp. (lobelia)
Arundinaria gigantea (cane)	Lolium pratense (meadow fescue)
Asimina triloba (pawpaw)	<i>Lonicera japonica (Japanese honeysuckle)</i>
Asplenium platyneuron (ebony spleenwort)	Luzula echinata (wood rush)
Aster cordifolius (heart-leaved aster)	Matelea sp. (milkvine)
Athyrium asplenoides (southern lady fern)	Melica mutica (melicgrass)
Barbarea verna (spring cress)	<i>Microstegium vimineum (Vietnam grass)</i>
Betula nigra (river birch)	Mitchella repens (partridgeberry)
Bidens bipinnata (Spanish needles)	Morus rubra (red mulberry)
Bignonia capreolata (cross vine)	Nyssa sylvatica (black gum)
Boehmeria cylindrica (false nettle)	Onoclea sensibilis (sensitive fern)
Botrychium virginianum (rattlesnake fern)	OPHIOGLOSSUM VULGATUM (Southern Adder's-Tongue Fern)
Brachyelytrum erectum (long-awned wood grass)	Oxalis violacea (purple wood sorrel)
Cacalia atriplicifolia (Indian plantain)	Oxydendrum arboreum (sourwood)
Calycanthus floridus (sweetshrub)	Panicum dichotomum (fall panicum)
Cardamine concatenata (lace-leaved toothwort) (rare outside of the mountains)	Parthenocissus quinquefolia (Virginia creeper)
Cardamine diphylla (twinleaved toothwort)	Passiflora lutea (yellow passion-plant)
Cardamine hirsuta (hairy bittercress)	Phryma leptostachya (lopseed)
Carduus lanceolatus (bull thistle)	Pinus echinata (shortleaf pine)
Carex abscondita (thicket sedge)	<i>Plantago rugelii (round-leaved plantain)</i>
Carex albicans (white-tinged sedge)	Platanus occidentalis (sycamore)
Carex appalachica (Appalachian sedge)	Poa sp. (spring bluegrass)
Carex crebriflora (Coastal Plain sedge)	Podophyllum peltatum (mayapple)
Carex comosa (long-haired sedge)	Polygonatum biflorum (Solomon's seal)
Carex cumberlandensis (Cumberland sedge)	Polygonum punctatum (spotted smartweed)

Carex laevivaginata (smooth-sheathed sedge)	Polygonum sagittatum (tear-thumb)
Carex laxiculmis (spreading sedge)	Polymnia uvedalia (bearpaw)
Carex leptoneura (nerveless sedge) Second record for SC	Polypremum procumbens (polypremum)
Carex oxylepis (sharp-scaled sedge)	Polystichum acrostichoides (Christmas fern)
Carex retroflexa (reflexed sedge)	Populus deltoides (eastern cottonwood)
Carex scoparia (pointed broom sedge)	Prenanthes trifoliolata (gall-of-the-earth)
Carex striatula (lined sedge)	<i>Prunella vulgaris</i> (self-heal)
Carex torta (twisted sedge) (along creek)	Prunus serotina (black cherry)
Carex venusta (dark green sedge)	Quercus alba (white oak)
Carpinus caroliniana (hop hornbeam)	Quercus coccinea (scarlet oak)
Carya cordiformis (bitternut hickory)	Quercus prinus (chestnut oak)
Carya glabra (pignut hickory)	Quercus rubra (red oak)
Celtis laevigata (sugarberry)	Quercus velutina (black oak)
Cercis canadensis (redbud)	Ranunculus acris (common buttercup)
Chaerophyllum sp. (chervil)	Ranunculus hispidus (hispid buttercup)
Chimaphila maculata (pipsissewa)	Ranunculus recurvatus (hairy buttercup)
Chionanthus virginicus (fringe tree)	Rhus glabra (smooth sumac)
<i>Chrysanthemum leucanthemum</i> (ox-eye daisy)	Rhus radicans (poison ivy)
Claytonia virginica (spring beauty)	Robinia pseudoacacia (black locust)
Clematis virginiana (Virgin's bower)	<i>Rosa multiflora</i> (multiflora rose)
Cocculus carolinus (coral beads)	Rubus canadensis (Canada blackberry)
Cornus amomum (swamp dogwood)	Rubus sp. (sand blackberry)
Cornus florida (dogwood)	Rubus sp. (dewberry)
Cynoglossum virginianum (Virginia dog's-tongue)	Rudbeckia laciniata (lace-leaved coneflower)
<i>Dactylon</i> sp. (orchard grass)	Ruellia caroliniensis (wild petunia)
Daucus carota (Queen Anne's lace)	Rumex acetosella (sourweed)
Decumaria barbara (climbing hydrangea)	Rumex crispus (curly dock)
Dichanthelium boscii (Bosc's panic grass)	Salix nigra (black willow)
Diodia virginiana (buttonweed)	Salvia lyrata (lyre-leaved sage)
Dioscorea villosa (wild yam)	Sambucus canadensis (elderberry)
Diospyros virginiana (persimmon)	Sanguinaria canadensis (bloodroot)
Duchesnea indica (Indian strawberry)	Sanicula sp. (snakeroot)
<i>Elaeagnus umbellata</i> (autumn olive)	Sassafras albidum (sassafras)
Elymus sp. (wild rye grass)	Schizachyrium scoparium (little bluestem)
Epifagus virginiana (beech-drops)	Scleria triglomerata (nutrush)
Erigeron pulchellus (daisy fleabane)	Scutellaria sp. (skullcap)
Euonymus americanus (hearts-a-bursting)	Senecio anonymus (Small's ragwort)
Eupatorium capillifolium (dog fennel)	Sisyrinchium sp. (blue-eyed grass)
Eupatorium purpureum (Joe-pye weed)	Smilacina racemosa (false Solomon's-seal)
Euphorbia corollata (spurge)	Smilax glauca (white-leaved greenbriar)
Fagus grandifolia (American beech)	Solidago arguta (early goldenrod)
Fraxinus americana (white ash)	Solidago odora (fragrant goldenrod)
Fraxinus pensylvanica (green ash)	Solidago rugosa (rough goldenrod)
Galium circaezans (Piedmont bedstraw)	Stellaria media (common chickweed)
Galium triflorum (triflorate bedstraw)	Stellaria pubera (giant chickweed)
Geranium maculatum (wild geranium)	Stipa avenacea (needle grass)
Geum canadense (Canada avens)	Thalictrum thalictroides (rue anemone)
Gleditsia triacanthos (honeylocust)	Tiarella sp. (foamflower)
Halesia carolina (silverbell)	Tilia heterophylla (white basswood)
Hamamelis virginiana (witch-hazel)	Tipularia discolor (crane-fly orchid)
Helianthus atrorubens (red-leaved sunflower)	Tovara virginiana (jumpseed)
Helianthus microcephalus (small-headed sunflower)	Trillium cuneatum (sweet betsy)
Hepatica americana (American liverleaf)	Ulmus alata (winged elm)

<i>Heuchera americana</i> (American alumroot)	<i>Ulmus americana</i> (American elm)
<i>Hexastylis arifolia</i> (common heartleaf)	<i>Uvularia perfoliata</i> (perfoliate bellwort)
<i>Hieracium venosum</i> (hawkweed)	<i>Vaccinium arboreum</i> (sparkleberry)
<i>Houstonia caerulea</i> (bluets)	<i>Vaccinium elliottii</i> (Elliott's blueberry)
<i>Houstonia purpurea</i> (purple bluets)	<i>Valerianella</i> sp. (corn salad)
<i>Ilex decidua</i> (deciduous holly, possum haw)	<i>Verbena brasiliensis</i> (Brazilian verbena)
<i>Ilex opaca</i> (American holly)	<i>Verbesina occidentalis</i> (chaffseed)
<i>Impatiens capensis</i> (jewelweed)	<i>Viola affinis</i> (floodplain violet)
<i>Iris cristata</i> (dwarf crested iris)	<i>Viola hastata</i> (halberd-leaved violet)
<i>Juglans nigra</i> (black walnut)	<i>Viola palmata</i> (palmate violet)
<i>Juncus</i> sp. (needlerush)	<i>Viola sororia</i> (common violet)
<i>Juncus effusus</i> (common needlerush)	<i>Vitis rotundifolia</i> (muscadine)
<i>Juncus tenuis</i> (path rush)	



Adder's Tongue →



Legend
█ Right-of-Way Limits



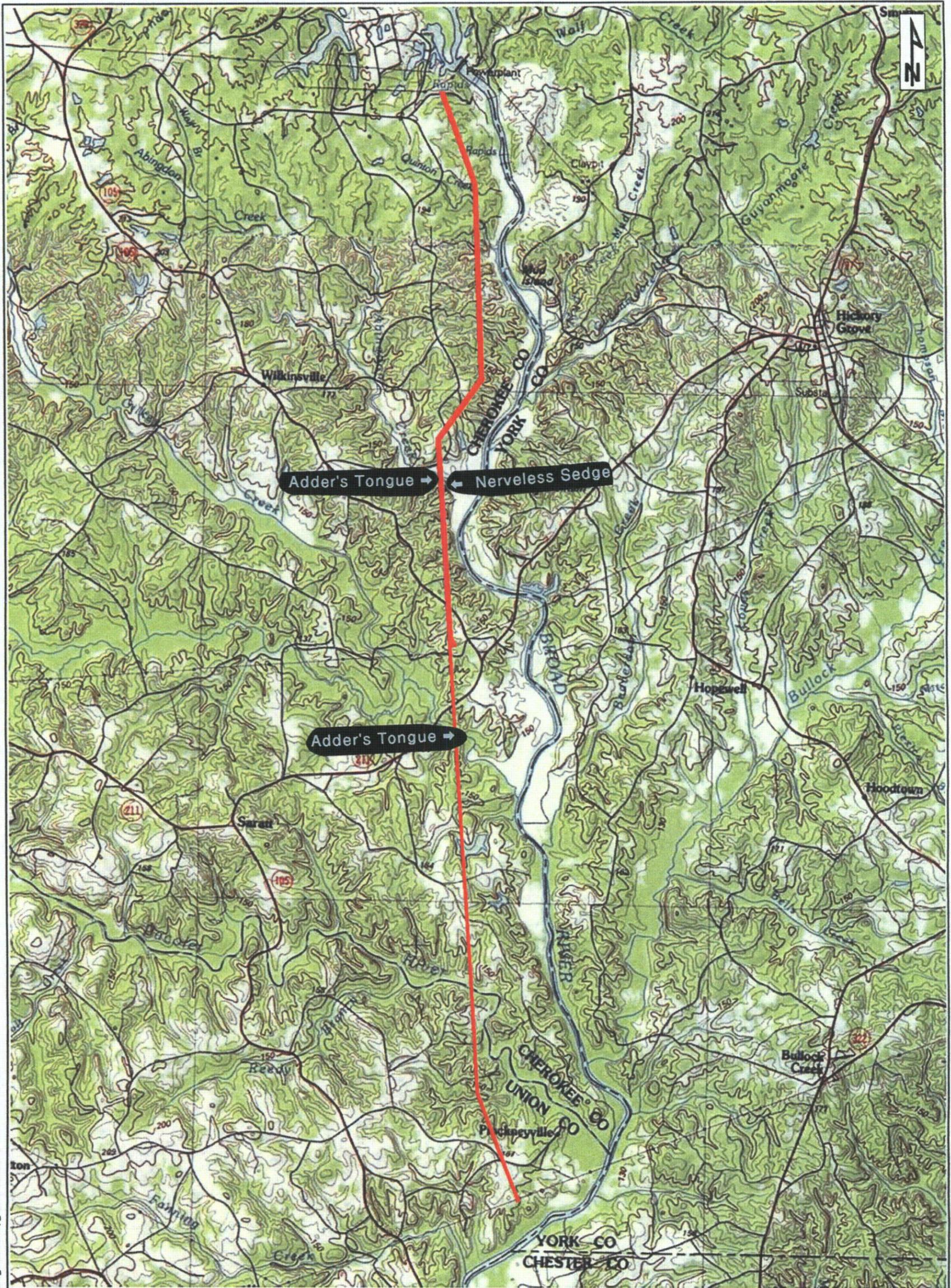
Duke Energy Carolinas, LLC
WILLIAM STATES LEE III 230KV TO 525 KV
TRANSMISSION LINE ECOLOGICAL REPORT

Overview Location Map
 with William S. Lee III Nuclear Station
 Transmission Line – West Line (Route K)
 South Carolina

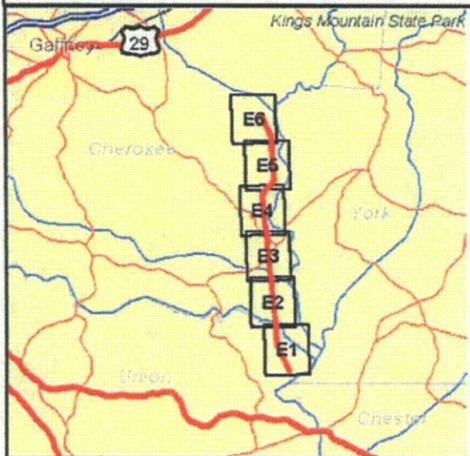
07/09/2009

Source: Field Reconnaissance 2009, ESRI 9.2 Base Data, 2007.

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 Right-of-Way Limits



Duke Energy Carolinas, LLC

**WILLIAM STATES LEE III 230KV TO 525 KV
 TRANSMISSION LINE ECOLOGICAL REPORT**

**Overview Location Map
 with William S. Lee III Nuclear Station
 Transmission Line - East Line (Route O)
 South Carolina**

07/09/2009

Source: Field Reconnaissance 2009, ESRI 9.2 Base Data, 2007.

Lee Nuclear Station Response to Request for Additional Information (RAI)

RAI Letter Dated: June 22, 2010

Reference NRC RAI Number: ER RAI 179, Terrestrial Ecology

NRC RAI:

Provide addenda to the 230 kV and 525 kV Transmission Line Ecological Survey Report (ML092710484) for avifauna and herpetofauna, that include field survey methods, locations, and results.

Duke Energy Response:

NRC COL/ESP-ISG-004, Interim Staff Guidance on the Definition of Construction and Limited Work Authorizations, states that building of transmission lines are not considered construction activities, and may be conducted without a combined license (COL), limited work authorization (LWA), or early site permit (ESP) authorizing limited work authorization (LWA) activities. The Interim Staff Guidance also notes that "The NRC and Council on Environmental Quality (CEQ) regulations and guidance indicate that the level of analysis of environmental impacts should be commensurate with the level of impact." NUREG-1555, Environmental Standard Review Plan (ESRP) 4.7 notes that reviewers should "...focus on cumulative impact information that is relevant to reasonably foreseeable significant adverse impacts, is essential to a reasoned choice among alternatives, and can be obtained without exorbitant cost."

Duke Energy considered avifauna in performing the survey of threatened and endangered species associated with the transmission line corridors. The results of this survey were provided to NRC as the supplemental response to ER RAI 90 on September 23, 2009 (ML092710471). As noted in the Siting and Environmental Report for the William States Lee III Nuclear Station 230 kV and 525 kV Fold-In Lines, Cherokee and Union Counties, NC, submitted to NRC on January 28, 2008 (ML080350324), the transmission routes were selected by evaluating a 283 square mile study area for multiple environmental impacts. Within the study area there were approximately 122,000 forested acres. The transmission lines are projected to remove 0.64% of this forest habitat. Consequently, since no threatened or endangered avifauna were identified and disturbance of avifauna habitat would be minimal, impacts to avifauna along the transmission lines should be minimal. Consistent with the NRC Interim Staff Guidance and NUREG-1555, ESRP 4.7, Duke Energy did not conduct detailed avifauna surveys for the transmission lines because the impacts to avifauna were expected to be minimal.

Duke Energy considered herpetofauna in performing the survey of threatened and endangered species associated with the transmission line corridors. The results of this survey were provided to the NRC as a supplemental response to ER RAI 90 on September 23, 2009 (ML092710471). The Lee Nuclear Station Combined License Application, Part 3 Environmental Report (ER), Section 4.2.2.5, states that "Structure strips for transmission towers were sited such that streams and wetlands are spanned by the conductors. Spanning wetlands minimizes construction activities involving both wheeled and tracked equipment, to minimize potential impact to the wetlands." Consequently, since no threatened or endangered herpetofauna were identified and disturbance of herpetofauna habitat would be minimal, impacts to herpetofauna along the

Duke Letter Dated: June 25, 2010

transmission lines should be minimal. Consistent with the NRC Interim Staff Guidance and NUREG-1555, ESRP 4.7, Duke Energy did not conduct detailed herpetofauna surveys for the transmission lines because the impacts to herpetofauna were expected to be minimal.

Associated Revision[s] to the Lee Nuclear Station Combined License Application:

None

Attachment:

None

Lee Nuclear Station Response to Request for Additional Information (RAI)

RAI Letter Dated: June 22, 2010

Reference NRC RAI Number: ER RAI 194 Land Use

NRC RAI:

Provide additional information on zoning and land use restrictions, including how Pond C property is currently zoned and how it would be zoned if the land is converted to a pond. Also, explain any land use restrictions that would apply to the Pond C site.

Duke Energy Response:

The Make-Up Pond C property is not currently zoned. This was illustrated in Figure 10 of *Siting and Environmental Report for the William States Lee III Nuclear Station 230 kV and 525 kV Fold-In Lines, Cherokee and Union Counties, NC* submitted to NRC January 28, 2008 (ML080350324). There is no zoning in the unincorporated areas of Cherokee County.

There are no current deed restrictions on the property purchased for Make-Up Pond C.

Associated Revisions to the Lee Nuclear Station Combined License Application:

None

Attachments:

None