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September 28, 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
(ER RAI 207, ER RAI 208, ER RAI 212, ER RAI 214, ER RAI 215, and ER RAI 219)
Ltr# WLG2010.09-08

Reference: Letter from Sarah Lopas (NRC) to Bryan Dolan (Duke Energy), Follow-Up Requests for Additional Information Regarding the Supplement to the Environmental Report for the William States Lee III Nuclear Station, Units 1 and 2 Combined License Application, dated September 14, 2010 (ML102371173)

This letter provides the Duke Energy responses to the Nuclear Regulatory Commission's requests for additional information (RAIs) listed below, as requested in the referenced letter.

RAI 207, Ecology - Aquatic
RAI 208, Ecology - Aquatic
RAI 212, Ecology - Terrestrial
RAI 214, Ecology - Terrestrial
RAI 215, Ecology - Terrestrial
RAI 219, Cultural Resources

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

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NRO

Enclosures:

1) RAI 207, Ecology - Aquatic
2) RAI 208, Ecology - Aquatic
3) RAI 212, Ecology - Terrestrial
4) RAI 214, Ecology - Terrestrial
5) RAI 215, Ecology - Terrestrial
6) RAI 219, Cultural Resources

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 September 28, 2010

Vickie M Prenatt
Notary Public

My commission expires: May 11, 2011

SEAL

VICKIE M PRENATT
NOTARY PUBLIC
Mecklenburg County
North Carolina
My Commission Expires May 11, 2011

xc (w/o enclosures):

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

xc (w/ enclosures):

Sarah Lopas, Project Manager, DSER
Brian Hughes, Senior Project Manager, DNRL
Mickie Chamness, PNNL

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

RAI Letter Dated: September 14, 2010

Reference NRC RAI Number: ER RAI 207, Ecology - Aquatic

NRC RAI:

Describe the methods by which water will be removed from the farm ponds both outside and inside the footprint of Pond C, how the dikes will be breached, and the condition the ponds will be left in after the breaching is completed. Also describe the potential disposition of fish and other aquatic organisms and how their transplantation (or other disposition) will be determined.

Duke Energy Response:

The ponds will be maintained in their present condition by Duke Energy until work on Pond C begins, unless routine dam inspections identify significant problems or concerns with any of these dams that would warrant immediate or near term dam removal (any dam removal would be handled as outlined below).

Once the work begins on Pond C, one of the first activities will be to drain the existing ponds. The water will be drained from each existing pond by pumping and/or siphoning. The pump and/or siphon will be connected to a horizontal discharge distributor made of a perforated pipe. The distributor pipe will be placed at least 40 feet from the lower toe of the dam and will allow the water to drain evenly down the hill through the grass and into London Creek slowly. As a result of using this method the ponds will slowly be drained.

Once a pond has been drained of water, the dam will be removed. The former impoundment area will be sloped to drain. The footprint of the pond and dam will then be seeded and mulched.

As described in the Duke Energy report, *The Fish Community of Ponds near London Creek, Cherokee County, SC* (Abney and Coughlan, 2010), there were very limited numbers of fish in the ponds and several ponds contained no fish at all. In addition to the fish communities described in the Duke Energy report, turtles also exist in the ponds (see *Herpetological Survey of London Creek, Cherokee County, South Carolina and Its Vicinity* (M.E. Dorcas, 2009).

Consistent with past practice, Duke Energy will discuss fish and herpetofauna communities present in the ponds, as well as details regarding their final disposition, with the South Carolina Department of Natural Resources prior to any draining activities. At this time, no preliminary plans have been developed.

References:

1. Duke Energy Corporation, 2010. *The Fish Community of Ponds near London Creek, Cherokee County, South Carolina*, August 10, 2010.
2. Dorcas, M.E., 2010. *Herpetological Survey of London Creek, Cherokee County, South Carolina and Its Vicinity*, August 24, 2009.

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: September 14, 2010

Reference NRC RAI Numbers: ER RAI 208, Ecology - Aquatic

NRC RAI:

Provide a copy of the report on electro-fishing and other sampling conducted to survey aquatic species found in the farm ponds after it is finalized.

Duke Energy Response:

The requested report is provided as Attachment 208-1.

References:

None

Associated Revisions to the Lee Nuclear Station Combined License Application:

None

Attachment:

Attachment 208-1 Duke Energy Corporation, 2010. The Fish Community of Ponds near London Creek, Cherokee County, South Carolina, August 12, 2010.

Attachment 208-1

Duke Energy Corporation, 2010

The Fish Community of Ponds near London Creek

Cherokee County, South Carolina

August 12, 2010

THE FISH COMMUNITY OF PONDS NEAR LONDON CREEK, CHEROKEE COUNTY, SC

by

Michael A. Abney and David J. Coughlan

Corporate Environment, Health & Safety Services

Duke Energy Corporation

13339 Hagers Ferry Road

Huntersville, NC 28078

August 12, 2010

EXECUTIVE SUMMARY

Ponds in the London Creek watershed and within, or near, the proposed footprint of Make-Up Pond C for the proposed William States Lee Nuclear Station were surveyed for fish. Seven ponds were electrofished on April 29, 2010, and a total of 519 fish representing three species and one hybrid complex was collected. All fish were in the family Centrarchidae with pollution tolerance ratings of either tolerant or intermediately tolerant. Draining the ponds or use of a piscicide prior to construction of Make-Up Pond C could eliminate these existing ponds as sources of fish for the new reservoir.

INTRODUCTION

London Creek is a small, second order, intermittent stream with a drainage area of almost 2,500 ac located in the Broad River drainage in east-central Cherokee County, SC. Proposed construction of a new nuclear station on the Broad River in the vicinity of Ninety-Nine Islands Hydroelectric Station may necessitate construction of an associated off-stream storage reservoir (Make-Up Pond C) in the London Creek valley. Currently, this reservoir is designed to be void of fish, to the extent practicable. Impoundment of London Creek and neighboring ponds will likely provide a source of fish to the reservoir. The purpose of this sampling was to characterize fish communities in ponds within or near the proposed reservoir boundary. An earlier report (The fish community of London Creek, Cherokee County, SC, in 2008 – 2009) provides details on the fish community of London Creek.

METHODS AND MATERIALS

Locations

Fish collections occurred at seven pond locations (Bob's Pond and Ponds F1 - F6) northwest of the London Creek-Broad River confluence and within or near the proposed reservoir boundary (Figures 1 and 2).

Field Methods

Entire shorelines were sampled with boat-mounted electrofishing equipment on April 29, 2010. All netted fish were identified, measured (total length in mm), and returned to the pond. Water temperature (°C) and dissolved oxygen concentration (DO, mg/L) were measured at each location with a calibrated thermistor and DO probe, respectively. Substrate and shoreline characteristics were noted. Maximum pond depth (m) was measured using a portable depth finder or lead line.

Data Analysis

The number of fish collected/min was calculated to provide relative fish densities. Fish community data were analyzed for pollution tolerance using a methodology developed where each species is assigned a pollution tolerance rating of Intolerant, Intermediate, or Tolerant

(NC Department of Environment and Natural Resources [NCDENR] 2006). Length-frequency distributions were graphed to provide information on larger populations of sunfish and largemouth bass (Bob's Pond and Pond F1).

RESULTS AND DISCUSSION

General Comparison

Pond temperatures ranged from 17.2 - 22.7 °C, DO from 6.4 - 9.1 mg/L, and maximum depth from 2.9 - 8.5 m (Table 1). Ponds F1 - F6 had bare, eroded shorelines and mud substrate due to access by cattle (Figure 3). Bob's Pond had a mixed hardwood shoreline, providing shade and littoral fish habitat, and a substrate composed of mud and leaf litter.

The collective fish community sampled was comprised of three centrarchid species and one hybrid sunfish combination (Table 2). No fish were collected from Ponds F2 and F6 and only largemouth bass were collected from Ponds F3 and F4. A total of 519 fish was collected and over half were hybrid sunfish. Species collected were either tolerant or intermediately tolerant of pollution.

Data Analysis

Fish collection rates ranged from 0.0 - 1.15 fish/min and were highest in the larger ponds. Bob's Pond, surrounded with vegetation and removed from the direct influence of pastureland, had the highest collected number of fish/min and the most species. Length-frequency distributions indicate that all largemouth bass were small and of marginal fishing value. Although larger sunfish were present in Bob's Pond, low collection rates indicated their numbers would be commensurately low (Figures 4 - 6).

CONCLUSION

The three fish species and one hybrid sunfish complex sampled among the seven ponds are typical for farm ponds. Bob's Pond had the highest collected number of fish/min and the most species likely due to the relative isolation from pastureland and a wooded shoreline. The tolerant and intermediately tolerant pollution ratings and size distributions indicate the

resilience of the species present and likelihood of survival during the creation of a new water storage reservoir. It is anticipated that the small sizes of largemouth bass and the limited number of larger sunfish present in the ponds would not necessitate relocation of the fish. Draining the ponds or using a piscicide prior to reservoir construction could remove these potential sources of fish.

LITERATURE CITED

North Carolina Department of Environment and Natural Resources (NCDENR). 2006. Standard operating procedure. Biological monitoring: stream fish community assessment. NCDENR, Division of Water Quality, Environmental Sciences Section. Raleigh, NC.

Table 1. Measured parameters from seven ponds sampled near London Creek, Cherokee County, SC, April 29, 2010.

	Pond						
Parameter	Bob's	F1	F2	F3	F4	F5	F6
Pond Acreage	3.11	6.37	0.63	1.72	0.8	1.97	0.74
Electrofishing time (min)	63.3	39.9	11.8	18.4	11.6	25.6	8.5
Temperature (°C)	17.2	20.5	18.3	19.2	20.4	22.7	20.8
Dissolved oxygen (mg/L)	6.4	8.0	8.0	9.1	9.1	8.6	7.6
Maximum depth (m)	8.5	7.2	2.9	3.9	4.0	5.8	3.5

Table 2. Scientific and common names, pollution tolerance rating, number, and collected number of fish/min from seven ponds sampled near London Creek, Cherokee County, SC, April 29, 2010.

		Tolerance	Pond							
Scientific name	Common name	rating	Bob's	F1	F2	F3	F4	F5	F6	**Total**
Lepomis spp.	Hybrid sunfish	Tolerant	11	243				3		257
Lepomis macrochirus	Bluegill	Intermediate	101							101
Lepomis microlophus	Redear sunfish	Intermediate	38							38
Micropterus salmoides	Largemouth bass	Intermediate	39	30		16	20	18		123
Total			**189**	**273**		**16**	**20**	**21**		**519**
Collected no. fish/min			**0.50**	**1.15**		**0.16**	**0.34**	**0.12**		

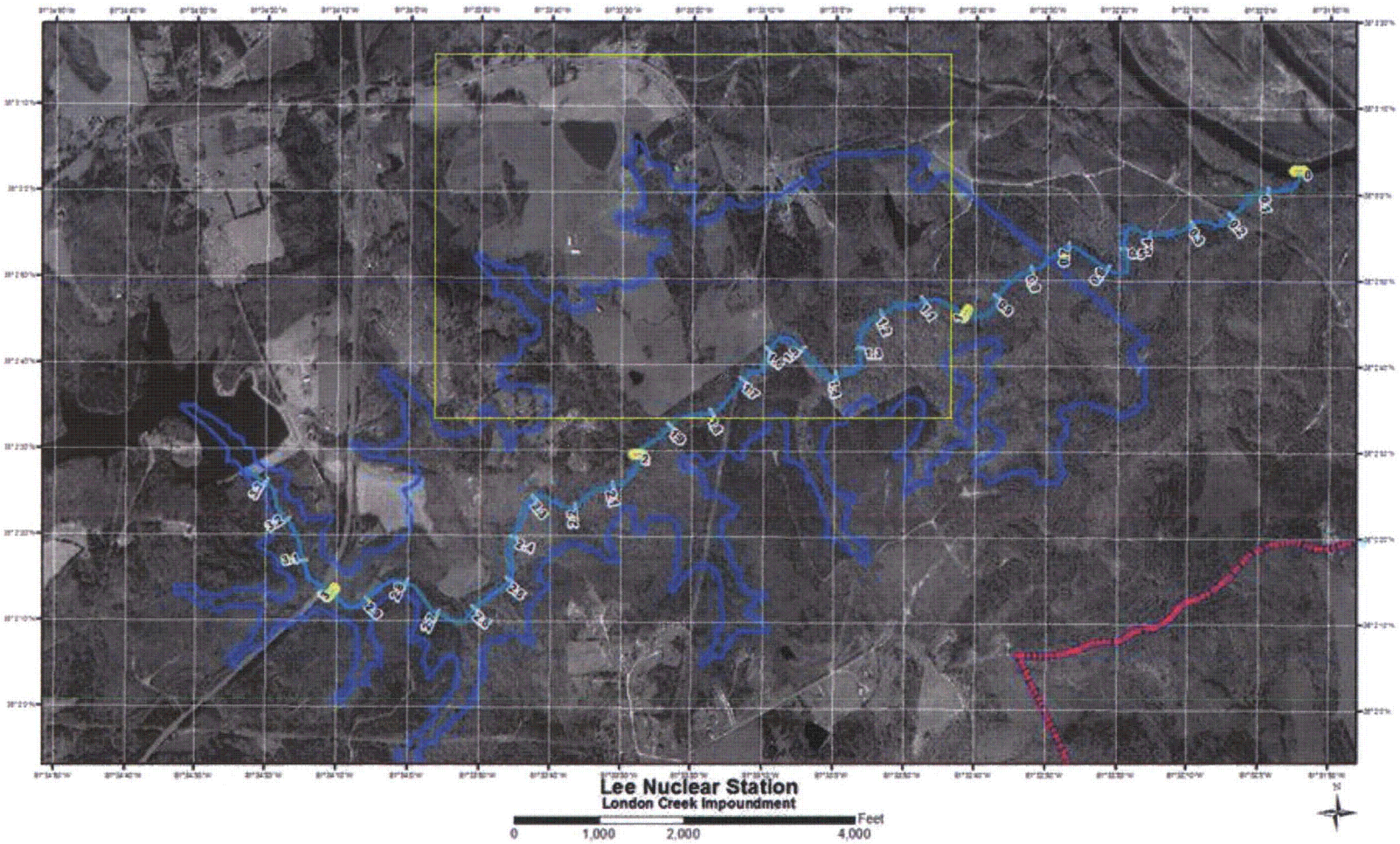

Figure 1. Aerial photograph of the London Creek, Cherokee County, SC, watershed. The Broad River is in the upper right corner and Lake Cherokee is at the center left. The outline of the proposed reservoir (Make-Up Pond C) is in blue, London Creek is teal colored, Lee Nuclear Station Project boundary is in pink, and the area of focus is within the yellow rectangle (and in Figure 2). Distances on London Creek are approximate river miles upstream from the Broad River and are denoted in miles and tenths of a mile.

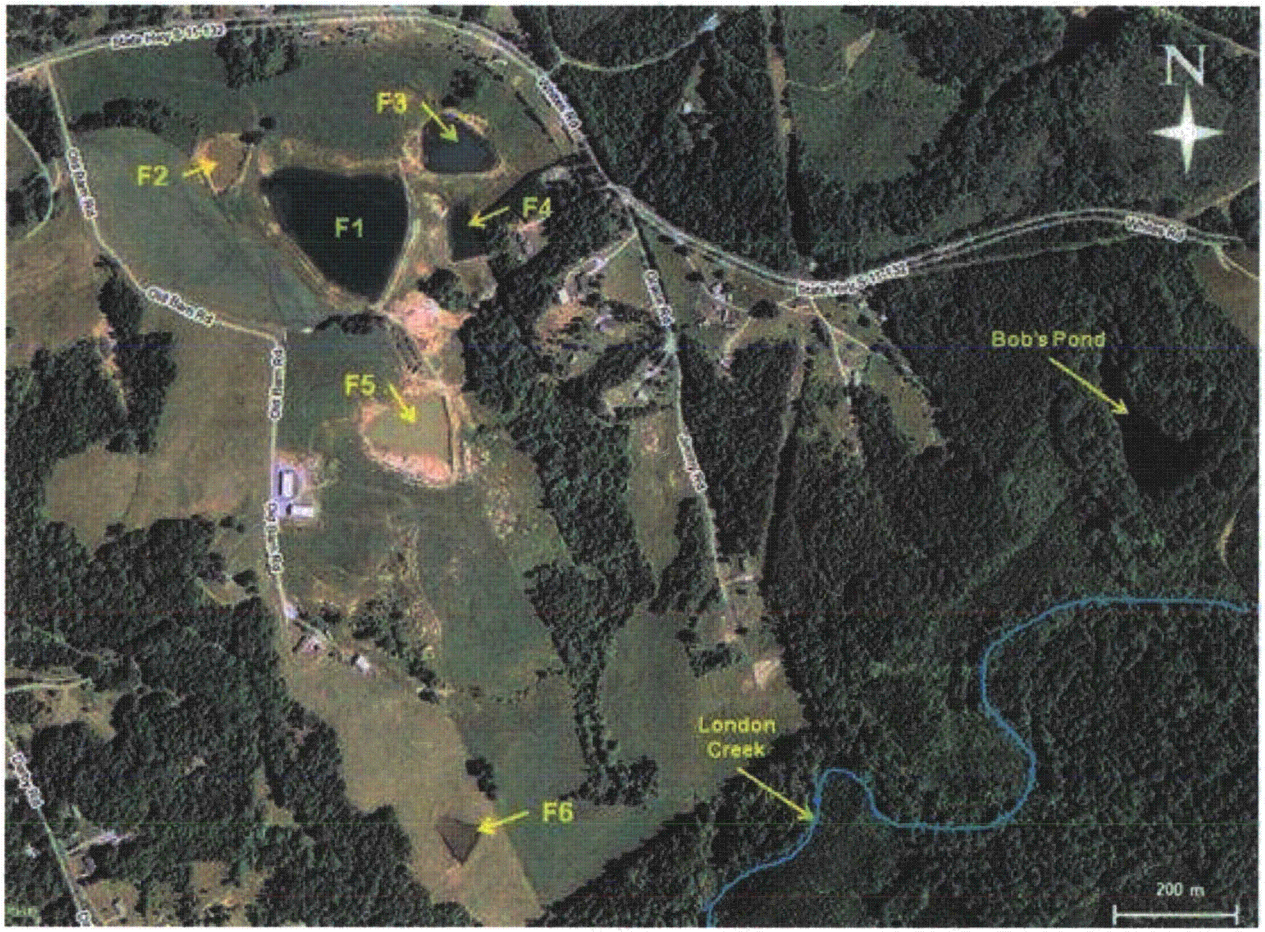

Figure 2. Aerial photograph of seven ponds sampled near London Creek, Cherokee County, SC.

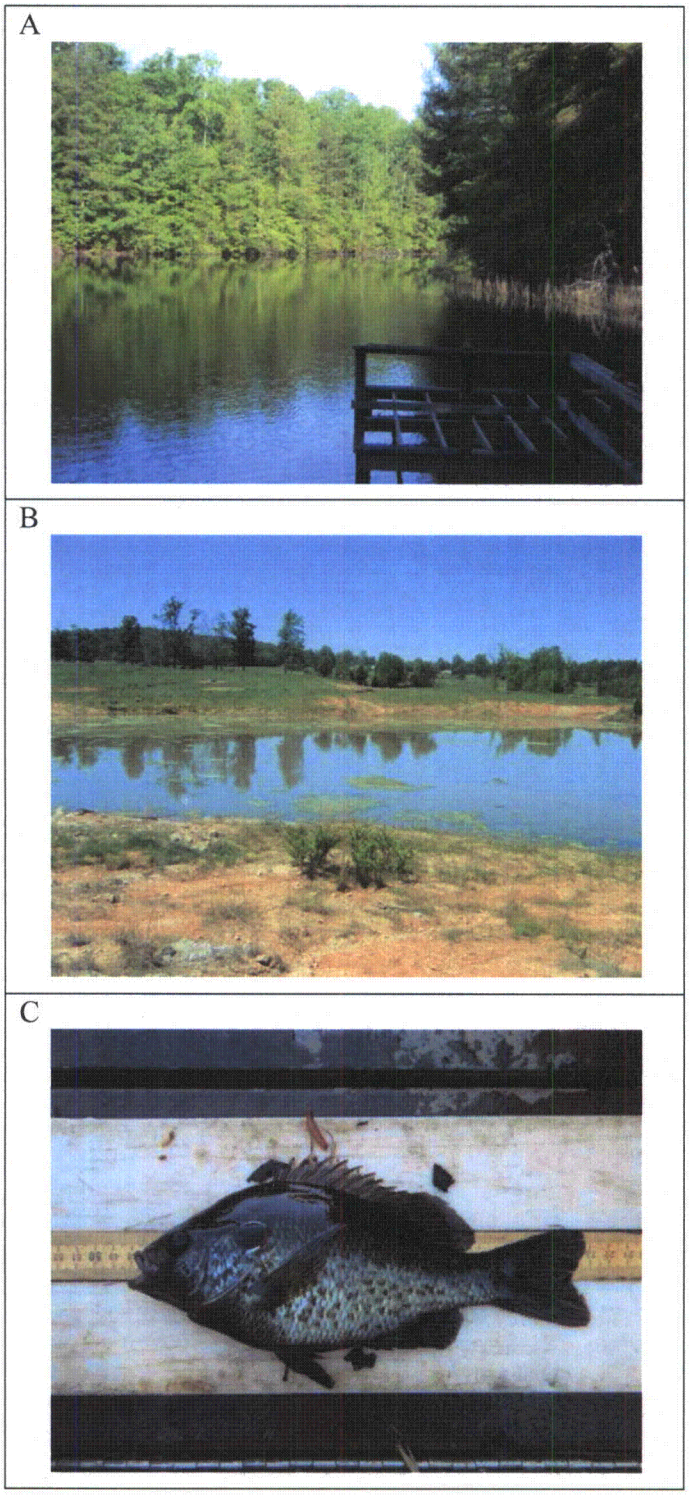

Figure 3. Photographs of Bob's Pond (A), Pond F5 (B), and redear sunfish (C) from ponds sampled near London Creek, Cherokee County, SC, April 29, 2010.

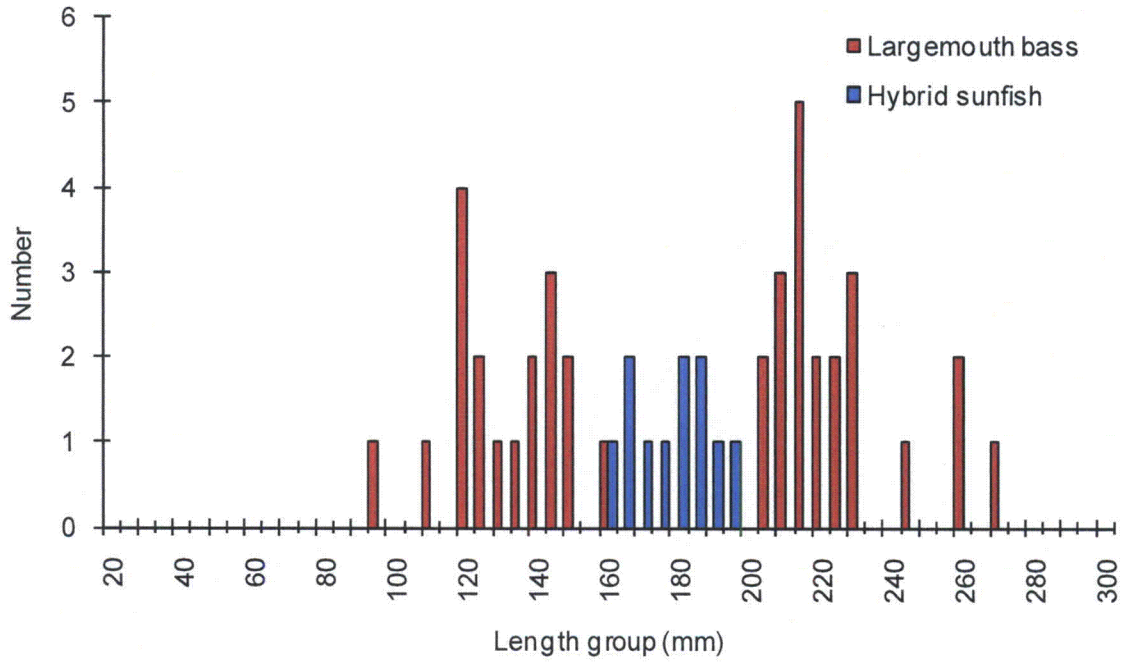

Figure 4. Length frequency distributions of largemouth bass and hybrid sunfish collected from Bob's Pond near London Creek, Cherokee County, SC, April 29, 2010.

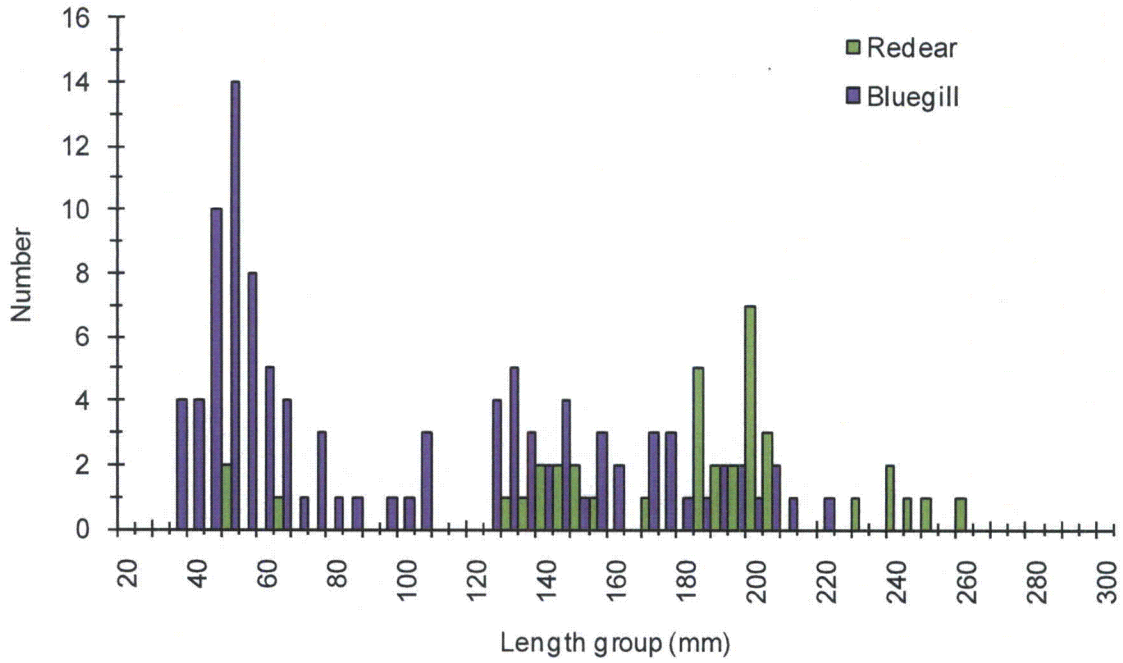

Figure 5. Length frequency distributions of redear and bluegill sunfish collected from Bob's Pond near London Creek, Cherokee County, SC, April 29, 2010.

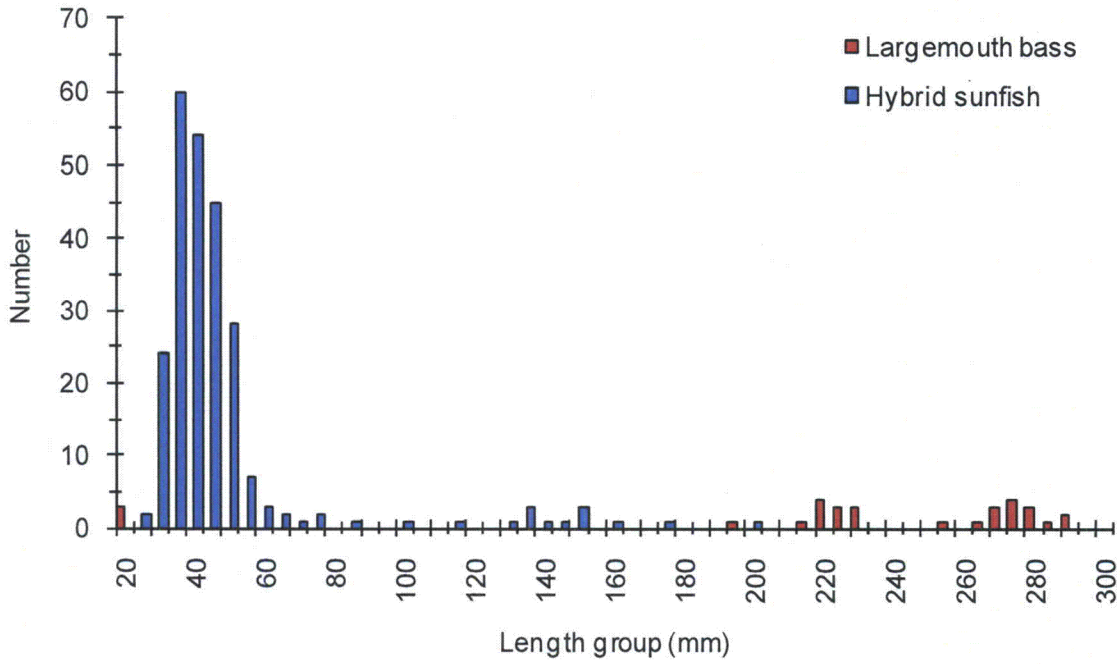

Figure 6. Length frequency distribution of largemouth bass and hybrid sunfish collected from Pond F1 near London Creek, Cherokee County, SC, April 29, 2010.

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

RAI Letter Dated: September 14, 2010

Reference NRC RAI Number: ER RAI 212, Ecology - Terrestrial

NRC RAI:

For each portion of the project (e.g., Lee site, railroad corridor, Pond C, transmission line corridors) provide information regarding Duke's commitment to disturb forest vegetation (particularly hardwood forest vegetation) outside the local March through June migratory bird nesting season. Also include in the response the types (pine or hardwood), location, and extent of forests potentially affected. If it is not possible for all forest disturbances to occur outside the nesting season, describe additional actions Duke will take, such as modification of the existing U.S. Fish and Wildlife Service migratory bird depredation permit.

Duke Energy Response:

Timbering and removal of trees as part of project activities associated with the Lee Nuclear Station is, whenever practical, scheduled outside the March through June breeding season for migratory birds. For the Lee Nuclear Station site, minimal acreage of forest vegetation is disturbed during construction as described in ER Subsection 4.3.1.1.1, summarized in ER Table 4.3-1, and shown on ER Figure 4.3-1. In the case of Make-Up Pond C, where the tree removal activities are required, timbering is concentrated in the summer, fall and winter periods. Forest vegetation disturbed during Make-Up Pond C construction is described in ER Subsection 4.3.1.2.3.1, summarized in ER Table 4.3-2, and shown on ER Figure 4.3-3. Actions such as timbering outside the breeding season for migratory birds mitigate the adverse impacts from construction of both the Lee Nuclear Station site and Make-Up Pond C, as outlined in ER Table 10.1-1 (Sheet 2 of 3). Little impact is expected to trees along the railroad corridor because the existing railroad bed is still largely intact. Trimming of trees along most of the railroad corridor, and minimal tree removal in the area of the short detour at the Reddy Ice Plant is required.

The transmission line corridors are cleared using mechanized equipment, but in environmentally sensitive areas this clearing is done by hand. The siting of transmission towers/poles is conducted to avoid environmentally sensitive areas. Additionally, clearing and grubbing with heavy equipment would be scheduled to avoid the March – June nesting period to the extent practical. If avoidance proves infeasible, Duke Energy is required to amend the existing USFWS and SCDNR depredation permits. Duke Energy's Federal and SCDNR Migratory Bird Depredation Permit numbers are MB000257-0 and MD-19-10, respectively.

References:

None

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: September 14, 2010

Reference NRC RAI Number: ER RAI 214, Ecology - Terrestrial

NRC RAI:

Provide a conceptual approach for monitoring transplanted Georgia aster (*Symphyotrichum georgianum*) and state plant species of concern outside of the Pond C inundation area, as well as monitoring in conjunction with other more general mitigation discussed in TE-2.

Duke Energy Response:

Whether they are federal candidate species like the Georgia aster, or state listed species like adders tongue fern, Southern enchanter's nightshade, et al., Duke is required to discuss potential relocations with the U. S. Fish and Wildlife Service (USFWS) and the South Carolina Department of Natural Resources (SCDNR). If transplantation is agreed upon, Duke is required to follow relocation and monitoring procedures for each relocated species in accordance with permit requirements. No conceptual monitoring approach has been developed.

Although details, as mentioned above, would be coordinated with the regulatory agencies, several conceptual approaches would be considered:

- The plants could be moved to suitable habitat at a mitigation site for the Make-Up Pond C site (not yet identified), if such habitat exists.
- Individual Georgia aster plants could be relocated to a nearby site where Georgia aster was discovered during a recent botanical survey. The newly found site harbors four healthy Georgia aster plants and evidently has the preferred soil type for the species (clay with high levels of calcium and magnesium).
- The plants could be relocated to recognized botanical gardens located in the Greenville, Gaffney, and/or Charlotte area.

References:

None

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: September 14, 2010

Reference NRC RAI Number: ER RAI 215, Ecology - Terrestrial

NRC RAI:

Provide information on the methods and results for herpetofauna and bird surveys that is lacking, but was intended to be included, in the transmission line survey report (230 kV and 525 kV Transmission Line Ecological Survey Report – ADAMS Accession Nos. ML092710473, ML092710474, and ML092710472).

Duke Energy Response:

Survey Methodology

The methods used to survey for the presence or absence of known protected or species of concern animal species associated with the transmission line survey included compiling existing information and determining potential Project-related effects on those species. The first task was to consult the U.S. Fish and Wildlife Service (USFWS) listed animal species reports and the South Carolina Heritage Trust Program listings from which was generated a list of the species known to occur or potentially occur in the counties around the project and their preferred habitats. Additional information was gathered from such sources as field guides and breeding bird surveys.

Using the information gathered, visual surveys were conducted to determine either the presence or absence of the species and potential habitat in the Project area. These surveys were performed only within the proposed rights-of-way of the transmission lines.

The protected or species of concern animal species list included the southeastern myotis (*Myotis austroriparius*), bald eagle (*Haliaeetus leucocephalus*), Bachman's sparrow (*Aimophila aestivalis*), Henslow's sparrow (*Ammodramus henslowii*), loggerhead shrike (*Lanius ludovicianus*), American kestrel (*Falco sparverius*), eastern [northern] cricket frog (*Acris crepitans crepitans*), pickerel frog (*Rana palustris*), Carolina darter (*Etheostoma collis*), and Carolina heelsplitter (*Lasmigona decorata*).

Survey Results

Southeastern Myotis:

The southeastern myotis, a federal and state species of concern, has hibernacula/maternity colonies that are typically found in caves but other roosting sites include hollow trees, mine shafts, and buildings. Maternal colonies are formed in April and the bats usually disperse during October (Harvey et.al. 1999).

The two transmission line transects were searched by direct physical searches for any cave or cave-like environments. No structures that could be used for maternity colonies or hibernation

were observed and thus no mist netting or acoustic sampling was conducted. Several abandoned structures were observed onsite that may provide potential roosting sites only. Because no habitat suitable for hibernacula/maternity colonies was found, this proposed project is not expected to have any negative impact on the southeastern myotis.

Bald Eagle:

This large raptor is protected under the Bald and Golden Eagle Protection Act of 1940 (16 U.S.C. 668-668d, 54 Stat. 250- as amended) and although no longer federally listed under the Endangered Species Act, is still classified as Endangered in South Carolina. The bald eagle's breeding habitat most commonly includes areas close to seacoasts, large rivers, lakes, or other bodies of water that reflect the general availability of primary food sources including fish, waterfowl, and muskrats (Terres 1980).

The surveys of the rights-of-way include visual surveys for eagles and their habitat. No eagles were observed. The only potential habitat for the bald eagle that was observed was along the Broad River, but no nesting super canopy trees close to the Broad River were observed. As no eagles or nesting sites were observed during the survey, this proposed project is not expected to have any negative impact on the bald eagle.

Bachman's Sparrow:

This secretive sparrow species, a federal species of concern, is found in dry open pine or oak woods with grasses in the understory, palmetto scrub, and bushy pastures. It utilizes these habitats to nest (ground nester) as well as forage for food items which includes beetles, true bugs, grasshoppers, crickets, spiders and seeds of pine, grasses and other vegetation (Terres 1980).

During the rights-of-way surveys, none of the essential habitat types for this sparrow were observed and no singing males were noted. Therefore, the proposed project is not expected to have any effect on the Bachman's sparrow.

Henslow's Sparrow:

The Henslow's sparrow, a federal species of concern, is found in weedy or neglected pastures and fields that have dense vegetation one to two feet in height (Terres 1980). This species has only been observed below the South Carolina fall line during fall and winter months. There are no observations noted in the vicinity of the proposed project in its breeding or winter ranges (eBird 2010).

Potential habitat for this sparrow species does exist within the Project boundary. However, there were no observations of the sparrow during the field surveys of the rights-of-way, and data searches suggest the bird is not in the project area. Therefore, this project is not expected to impact this species.

American Kestrel:

The American kestrel, a federal species of concern, inhabits open fields, farmland/pastures, cities, and woodland edges throughout its range (Terres 1980). Potential habitat for this species does exist on both proposed transmission lines and the clearing of the rights-of-way will likely create additional habitat for this edge species. No American kestrels were noted during the visual surveys; however, miscellaneous winter sightings of a kestrel were documented around the new meteorological monitoring tower on the William States Lee III Nuclear Station site near

Make-up Pond B. It is likely the kestrel could be found in the transmission line project area, but it is not expected to be negatively impacted by construction activities.

Loggerhead Shrike:

The loggerhead shrike, a federal species of concern, inhabits open country, clearings, pastureland and scrubby areas along roadways (Terres 1980). During the rights-of-way field studies, shrike habitat was documented on both proposed transmission line routes within the Project boundary. Clearing the rights-of-way, as is also the case for the American kestrel, will likely create new habitat for this species. No loggerhead shrikes were noted during the visual surveys, however, miscellaneous sightings of this seldom observed species were made along roadways near the proposed Make-up Pond C (personal communication. Gene Vaughan – Duke Energy). It is likely the loggerhead shrike is in the transmission line project area, but it is not expected to be negatively impacted by transmission line construction activities.

Eastern [Northern] Cricket Frog:

This small frog, a South Carolina species of concern, is found throughout the southeast U.S.in freshwater habitats such as swamps, wetlands, farm ponds, small streams, bogs and other permanent water bodies (Dorcas 2008). Several of these habitats are present along the project's proposed rights-of-way. No cricket frogs were noted during the visual surveys; however, it is very likely they are present. The construction of the proposed project will have minimal impacts, if any, on this species due to construction avoidance of wetlands, riparian zones, and streams.

Pickerel Frog:

This medium-sized frog, a South Carolina species of concern, is found throughout much of the southeast where it inhabits floodplain swamps, streams, bogs and grassy wet meadows as well as farm ponds (Dorcas 2008). Several of these habitats are found along the project's proposed rights-of-way. No pickerel frogs were noted during the visual surveys; however, it is probable they are present. The construction of the proposed transmission project will have minimal impacts, if any, on this species as riparian zones, streams, and wetlands will be avoided.

Carolina Darter:

The Carolina darter, a member of the perch family (Percidae), inhabits small streams in areas of low velocity with mud, sand, and bedrock substrates. It is a documented resident of small streams in the Piedmont province of the Yadkin, Pee Dee, Catawba, Broad, and Saluda drainages in South Carolina. The Carolina darter is a species of special concern within the state because the geographical isolation of known populations makes them vulnerable to stream-side development, pollution, and habitat alteration.

No Carolina darters were collected in or around the Lee Nuclear Station site or the 99-Islands Dam in any of the fish surveys conducted by Duke Energy (1975, 2006). However, this species has been reported in two localities in York County, South Carolina (Rhode 2009).

Since the Carolina darter is a small stream species, and the streams to be spanned by the transmission lines will not be impacted by construction work, it is not anticipated that there will be any impairment of the species, if indeed they are even found in the areas under consideration.

Carolina Heelsplitter:

The Carolina heelsplitter, a state and federally endangered species, is a relatively large mussel often exceeding 100-mm in length. Juveniles tend to have a light-green shell while adults have an ovate, trapezoid-shaped shell that is yellowish, greenish-brown to dark brown in color. The nacre is pearly white to bluish-white, grading to orange in the area of the umbo (USFWS 2010).

Historically, the Carolina heelsplitter was reported from small to large streams and rivers as well as ponds. The ponds referred to in historic records are believed to have been mill ponds on small streams. This species is found in a variety of substrates usually near stable, well-shaded stream banks and in the main channel of streams, in relatively clean substrate comprised of sand, gravel, and cobble (USFWS 2010).

This mussel species is endemic of the Catawba River Basin and not the Broad River Basin. Since the proposed Project is located wholly in the Broad River Basin, no aquatic searches for the heelsplitter were deemed necessary.

References

1. Dorcas, M., and W. Gibbons. 2008. Frogs and Toads of the Southeast. Athens: University of Georgia Press
2. Duke Power Company (Duke Power). 1975. Project 81. Cherokee Nuclear Station Environmental Report and amendments. Charlotte, NC
3. Duke Power Company (Duke Power). 2006.
4. eBird. 2010. eBird: An online database of bird distribution and abundance [web application]. Version 2. eBird, Ithaca, New York. Available: http://www.ebird.org. (Accessed: September, 2010).
5. Harvey, Michael, J., Altenbach, S. and Best, T. 1999, Bats of the United States. Arkansas Game & Fish Commission and U. S. Fish and Wildlife Service
6. Rhode, F.C. 2009. Freshwater Fishes of South Carolina. Univ. of SC Press; 430 pages
7. Terres, John K. 1980. The Audubon Society Encyclopedia of North American Birds. Alfred A. Knopf, New York, NY. 1109 p.
8. U.S. Fish and Wildlife Service. 2010. Carolina Heelsplitter in North Carolina. U.S. Fish and Wildlife Service - Asheville, North Carolina. Available: http://www.fws.gov/nc-es/mussel/carolheel.html (Accessed: September, 2010)

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: September 14, 2010

Reference NRC RAI Number: ER RAI 219, Cultural Resources

NRC RAI:

Provide a written response outlining the overall management and protection plans for historic cemeteries, with a statement confirming that Duke will follow State law with regard to the Service Family Cemetery relocation and continued public access to other cemeteries. Also include a list of individuals who have requested access to historic cemeteries on the Lee Site (McKown, Stroup, Moss, Service, and unnamed) and the frequency of their requests.

Duke Energy Response:

There are four cemeteries located on the Lee Nuclear Site (Moss, Stroup, McKown, and an unnamed grave). The cemeteries have been located with Global Positioning System (GPS) technology and are represented as a spatial layer in the site Geographic Information System (GIS). The GIS data are expected to be used to depict cemeteries on construction drawings with directions to the construction staff not to disturb the cemeteries. The three named cemeteries (Moss, Stroup and McKown) are fenced. Duke Energy expects to maintain the fences. During construction, the cemeteries will be appropriately designated (e.g., marked with brightly colored tape) as an avoidance area. During construction, the cemeteries will be included in routine environment, safety and health inspections to ensure they have not been disturbed. The unnamed cemetery is very remote, but will also be appropriately marked prior to construction.

All four cemeteries are outside the main plant site security fence, but within the perimeter fence surrounding the Lee Nuclear Site. Access to cemeteries located within the site boundary is allowed in accordance with South Carolina Code of Laws, Section 27-43-310. Visitors are required to make an appointment through the site security office, and then check in at the main gate at the time of the appointment.

The interior of the cemeteries will be left in their natural state and maintenance activities conducted by Duke Energy will be conducted in accordance with plans submitted in advance to the SHPO.

A fifth cemetery, the Service Family Cemetery, is located within the footprint of Make-Up Pond C (MUPC). Prior to land clearing activities associated with development of MUPC, the Service Family Cemetery will be relocated in accordance with South Carolina Code of Laws, Section 27-43-10 through 40.

One individual, Catherine Harris, requested access to the cemeteries. Ms. Harris was given access and a tour of the cemeteries on August 9, 2010 by a Duke employee. Another individual contacted Duke regarding access to the cemeteries, but never followed up on the request. A descendent of the Service and Gaffney families, Mary Pat Tyndall, has been in contact with Brockington and Associates, Inc., Duke's cultural resources consultant on the project.

References:

South Carolina Code of Laws: Title 27 – Property and Conveyances, Chapter 43 – Cemeteries, Article 1 – Removal of Abandoned Cemeteries.

South Carolina Code of Laws: Title 27 – Property and Conveyances, Chapter 43 – Cemeteries, Article 3 – Access to Cemeteries on Private Property.

Associated Revisions to the Lee Nuclear Station Combined License Application:

None

Attachments:

None