



## United States Department of the Interior



### FISH AND WILDLIFE SERVICE

176 Croghan Spur Road, Suite 200  
Charleston, South Carolina 29407

March 6, 2012

Lt. Colonel Edward P. Chamberlayne  
District Engineer  
U.S. Army Corps of Engineers  
69A Hagood Avenue  
Charleston, SC 29403-5107

Attn: Dr. Richard Darden

Re: P/N SAC-2009-122-SIR, Duke Energy Carolinas, William States Lee, III Nuclear  
Facility, Cherokee County, FWS Log No. 2012-CPA-0036

Dear Colonel Chamberlayne:

The U.S. Fish and Wildlife Service (Service) reviewed the above-referenced public notice dated December 14, 2011, and offers the following comments. Duke Energy Carolinas (Duke) requested a Department of the Army (USACE) and the South Carolina Department of Health and Environmental Control (SCDHEC) permit pursuant to sections 401 and 404 of the Clean Water Act to place fill material in freshwater wetlands to allow for the construction of a nuclear facility near Gaffney, Cherokee County, South Carolina. This report is in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*) and section 7 of the Endangered Species Act, as amended (16 U.S.C. 1531-1543) (ESA). This report is also to serve as official comments to the SCDHEC.

The proposed impacts for the project is due to construction activities associated with the two new nuclear power units, ancillary facilities, a new drought contingency pond, intake and refill structures, roads, and four power transmission lines. Each of these activity categories will affect various wetland resource acreages and linear feet of streams. Specific impact amounts are not listed in this response as they may be found in the USACE notice. However, in total the proposed project will impact 5.43 acres of wetlands, 29.63 acres of open water, and 67,285 linear feet of streams. The applicant has developed a conceptual mitigation plan for the project to compensate for the impacts. To compensate for wetland and stream resource impacts, the applicant has proposed to combine credits from four separate mitigation banks as well as provide permittee responsible mitigation using a watershed approach.

The Service concurs with your determination that the proposed project is not likely to adversely affect federally endangered, threatened, or proposed species nor result in adverse modification to designated or proposed critical habitat. Please note that obligations under section 7 of the ESA must be reconsidered if: (1) new information reveals impacts from this identified action may affect listed species or critical habitat in a manner not previously considered; (2) this action is

subsequently modified in a manner, which was not considered in this assessment; or (3) a new species is listed or critical habitat is designated that may be affected by the identified action.

Service personnel have participated in site visits and meetings during the planning and development stages of the proposed project. During these events, concerns were provided to the applicant, the Nuclear Regulatory Commission, and the USACE either verbally or in written form. In addition, the Service will likely provide comments regarding future operation of the William State Lee facility through the Federal Energy Regulatory Commission process. Power generation by the William States Lee facility represents potential impacts to the Broad River. These potential impacts were not described in this public notice. However, the Service believes that impacts to the river should be an integral consideration as the proposed construction activities will lead into operation of the facility. Therefore, we included comments on potential impacts to the Broad River system.

Construction of the new power transmission lines will result in relatively minor clearing impacts to wetland resources. Reactor construction and its ancillary structures will affect a larger area of wetlands and streams, which were disturbed from a previous development venture. The Service finds the applicant's compensation package will be sufficient to mitigate for these minor impacts. However, we are concerned that the construction of contingency Pond C will result in impacts that cannot be compensated through the Mitigation Standard Operating Procedure or Federal Mitigation Rule.

The creation of Pond C will inundate four acres of existing vegetated wetlands. While this amount is not excessive compared to other proposals, the accompanying impact of over 65,000 linear feet of stream habitat is significant. Impacts resulting from the construction of Pond C will occur at the landscape level. This proposal will eliminate a series of interconnecting, contiguous streams that drain directly to the Broad River constituting the largest impact to streams in South Carolina by a single project.

Inundation will cover a large upland area adjacent to London Creek and its feeder streams. Over 620 acres of an ecologically diverse area including streams, riparian corridors, vegetated wetlands, and uplands will be lost from inundation and the proposed buffer clearing. As this project is located in the Atlantic Flyway for migratory birds the aquatic and terrestrial habitat found in the project area is essential layover habitat for migratory birds. These areas provide resting locations and forage opportunities during migration. Upland habitat also provides important habitat for numerous mammalian and herpetological species. Inundation will render these habitats unsuitable and force terrestrial species to move into adjacent areas, stressing existing, adjacent populations.

The Service believes that due to the significance, coverage, and magnitude of the impacts, the applicant should be required to compensate in an equally significant manner. We recommend that the applicant prepare a compensation package that will suitably mitigate for impacts that will occur at the landscape level. As stated in the public notice, the applicant's compensation package is a conceptual plan. Considering the complex nature of this project, we fully understand the difficulties in identifying suitable areas to affect appropriate mitigation. In light of this, we believe it would be appropriate to review the proposed mitigation locations during a multi-agency site visit prior to finalizing the proposed impact mitigation.

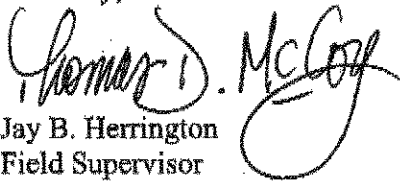
The Service is concerned with the effects of the proposed cooling tower blowdown discharge on the aquatic system of the Ninety-Nine Islands Reservoir and the Broad River downstream of the dam. The blowdown discharge would contain biocides, chemical additives, radioactive waste, and thermal effluent. The chronic and cumulative effect of chemicals and radioactive waste would adversely affect fish and invertebrate spawning and recruitment in the vicinity of the discharge within the reservoir, and downstream of the dam, particularly during periods of low flow.

Thermal effluent from reactor operation would affect fish and invertebrate spawning, and biological systems through stress and/or direct mortality. It would especially affect non-motile or slow moving invertebrates such as freshwater mussels and other aquatic invertebrates. In addition, the Service is concerned that the levels of copper and zinc proposed in the liquid effluent will exceed the SCDHEC criterion maximum concentration for these metals. This may violate South Carolina Water Classifications and Standards that establish maximum concentrations for freshwater.

The Service is not opposed to streamlining regulatory efforts for development projects; however, we believe the public notice for this project is premature. Even though the applicant has performed extensive work toward development of alternatives and impact assessments, the project has not moved beyond the Draft Environmental Impact Statement (EIS). As such, there remains an opportunity to identify concerns that need to be addressed, which may result in the project's revision. These revisions would be incorporated into the Final EIS. Further, the USACE cannot issue the permit based upon this application until the Final EIS is published and the Record of Decision is issued. Therefore, we believe it would be appropriate and prudent for the USACE to suspend action on this application until the resource agencies review the published Final EIS.

The Service appreciates the opportunity to provide comments on the public notice. If you have any questions on Service comments, please contact Mr. Mark Caldwell at (843) 727-4707 ext. 215 or Ms. Amanda Hill at (843) 727-4707 ext. 303 and reference FWS Log No. 2012-CPA-0036.

Sincerely,

  
for Jay B. Herrington  
Field Supervisor