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NPD-MISC-2012-024

December 3, 2012

Dr. Richard Darden  
U.S. Army Corps of Engineers  
Charleston District  
69-A Hagood Street  
Charleston, South Carolina 29403-5107

Subject: William States Lee III Nuclear Station  
Cherokee County, South Carolina  
404 Application and Jurisdictional Determination

Dear Dr. Darden:

This letter responds to the questions submitted by you via e-mail on behalf of Terry Eucker on October 31, 2012 as they relate to the Request for Jurisdictional Determination and the Section 404 Permit Application for the William States Lee III Nuclear Station.

Enclosed are three sets of the following:

1. Responses to Questions in the Referenced October 31, 2012 Email
2. Shapefiles for the JPA and JD Boundaries, Jurisdictional and Non-Jurisdictional Resources (provided on enclosed CD)
3. Impact Tables by Activity (hard copy and provided on enclosed CD)
4. Jurisdictional Resource and Jurisdictional Boundary Maps (hard copy and provided on enclosed CD)
5. Jurisdictional Resources and Permit Area Boundary Maps (hard copy and provided on enclosed CD)

If you have questions, or require further clarification, please contact either Corey Gray at 757-812-0158 or me at 704-382-4669.

Sincerely,

Robert Wylie  
Environmental Project Manager

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Enclosures:

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cc: Terry Eucker w/Enclosures  
Corey Gray w/Enclosures

**Enclosure 1**

**Responses to Questions in the Referenced October 31, 2012 Email**

Duke Energy Response to Information Request from the USACE  
December 3, 2012

1. USACE Comment:

Since according to the letter to DHEC dated August 30, 2012 Duke will no longer be clearing a 50 foot wide buffer around Pond C can you tell me whether the following impacts will also no longer occur? (These were listed in the EIS as impacts associated with creation of Pond C but located outside of the inundation footprint.) If any of these impacts will still occur can you please confirm the acreages are correct for me?

- a. Temporary wetland impacts outside the Make-Up Pond C inundation footprint from temporarily filling 0.04 ac of wetland within the 50-ft buffer.
- b. Permanent wetland impacts (<0.01 ac) that would occur outside the Make-Up Pond C inundation footprint from mechanized clearing of vegetation within the 50-ft buffer (<0.01 ac) and conversion of the area (<0.01 ac) to emergent wetland.
- c. Temporary riparian impacts outside the Make-Up Pond C inundation footprint from cutting 884 ft of stream shoreline vegetation within the 50-ft buffer area.

Duke Energy Response:

To facilitate construction activity in and around the reservoir, a 50-ft wide area around the full pond elevation is anticipated to be cleared. This is considered part of the temporary impacts during the construction of the dams, dikes, spillway and road improvements. This clearing will be required to facilitate reservoir rim slope stability measures that will be evaluated as the reservoir clearing is being performed. It is also necessary to access areas on the steep south rim of the reservoir when constructing specified operations infrastructure and the dams and dikes. Therefore, these impacts will remain. The clearing is considered a temporary impact used during construction. The clearing will be allowed to revegetate naturally after construction is completed except areas around permanent structures and roadways, which will be maintained free from tree and large brush growth due to undesirable consequences of root growth on the structures.

2. USACE Comment:

Do you plan to revise the JPA plans since Duke is no longer doing the 50' buffer? Can you please advise me of any changes in the project since the Environmental Report was submitted other than: no longer doing the buffer, the recent moving of the plant, and the drawdown of the 2 ponds?

Duke Energy Response:

The JPA is presently not planned to be revised. At this point in time there are no changes to the project that will result in additional impacts to Waters of the US.

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3. USACE Comment:

Also according to the letter to DHEC dated August 30, 2012 Duke plans to have minimal seasonal flow releases from Make-Up Pond C to London Creek downstream of Make-Up Pond C dam (January through April 1.5 cfs; May, June and December 1.0 cfs; July through November 0.75 cfs). Will these releases be during construction, only after construction, or both?

Duke Energy Response:

The minimum seasonal flow releases referenced in the August 30, 2012 letter to SCDHEC refers to releases post construction. During construction, inflow into the construction area will be passed through sediment settling structures and then will be passed through pipes in the spillway structure to London Creek downstream of Make-Up Pond C dam, except for a limited transition time period. Duke Energy anticipates that when transitioning from construction to pond filling there will be a limited time (approximately three months) where passing of inflow will be suspended as pipes through the spillway will be sealed as the spillway is completed and filling of the pond commences. During this time period pump(s) will be utilized to meet the proposed minimum seasonal flow releases.

4. USACE Comment:

There is some proposed flooding of forest SCDNR land around Lake Cherokee. Can you tell me where this work is shown on the JPA plans (is it just the flooding at the base of the dam), what is the acreage and habitat type to be impacted? Does Duke have an agreement with SCDNR to cover this work on their land?

Duke Energy Response:

Information regarding acreage and habitat impacts to SCDNR property as a result of drought contingency Pond C was provided to NRC in the Duke Energy response to RAI 159, dated July 1, 2010 (ML101880072) and is summarized below:

The creation of drought contingency Pond C will inundate approximately 2.4 acres of mixed hardwoods within the Lake Cherokee property owned by the SCDNR. Another 1 acre of mixed hardwoods within the property will be cleared within 50 feet of the full pond elevation. This area will be allowed to revegetate naturally upon completion of construction. Approximately 1 acre of open areas, fields and meadows, consisting of the Lake Cherokee dam will be impacted by the inundation of drought contingency Pond C and associated spillway improvements to the Lake Cherokee dam.

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The proposed work is further detailed in the William S. Lee III Nuclear Station Joint Application for Activities Affecting Waters of the United States Volume I, Part II.A – Permit Drawings, Sheets B6 and B7.

Impacts are shown and described as follows:

Sheet B6: OB14b Impact 0.01 acres (filling)

Sheet B7: OB14c Impact 0.01 acres (filling)  
OB14e Impact <0.01 acres (filling)  
TB101a Impact 59 feet (filling)  
TB101b Impact 65 feet (flooding)  
TB102a Impact 159 feet (filling)  
TB102b Impact 78 feet (flooding)  
TB15a Impact 365 feet (flooding)

Stream descriptions are detailed within the Section 404 Individual Permit Application – Appendix I.A Jurisdictional Summary Tables (revised October 15, 2012, Page 18 of 50).

As described in the *Duke Energy Response to SCDHEC 401 Request for Additional Information*, dated September 26, 2012, Duke Energy is working with SCDNR to obtain an agreement for work within SCDNR property (see SCDNR Comments 30 and 31, Enclosure Pages 30 and 31 of 52).

5. USACE Comment:

Can Duke readily from your existing databases produce a table that shows for each wetland that will be impacted, what type of wetland it is? Or do I need to do this by checking the ncwamm forms for each impacted wetland?

Duke Energy Response:

A table is provided. See response to item 6 (Enclosure 3).

6. Can Duke readily provide from your existing databases a table for each wetland, stream and open water the acreage of the various types of impacts to each, and then for each type of impact what the activity is that is causing the impact? For example say we have wetland x and it is 5 acres in size. The impacts to it are 3 acres filling, 1 acre flooding, 1 acre no impact. Of the 3 acres of filling, 2 acres of the fill are due to road construction activities and 1 acre is due to construction of a dam. I already have a table that gives me the first level of breakdown – the types of impact to each wetland and the size of each. But without looking at the JPA plans and pulling out what activity is actually causing each impact I cannot get to the next level. I was hoping you may have already done this. I am really only looking for this level

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of detail for major activities such as roads, dams, but will take whatever you can provide.

Duke Energy Response:

Three tables are submitted that include the proposed impacts from the Lee Nuclear Station (Enclosure 3). Each table includes columns for the JD boundary, JD ID, permit component, impact ID, impact type, activity causing the impact, and the area/length of the impact. Additionally, the table for wetland impacts includes the wetland type determined during the functional assessment. The North Carolina Wetland Assessment Methodology (NCWAM) was used to determine the wetland type for use in the functional assessment. Wetland types are described in the enclosed attachment. Please note that these wetland types are based upon specific criteria such as vegetation, landscape position, hydrology, and size as the same are defined in the NCWAM. In some instances, wetlands classified as a specific NCWAM wetland type would not meet the definition of a similarly named wetland type using another classification system. For example, bottomland hardwood forests are identified using the NCWAM criteria but these same areas would not meet the USEPA description of bottomland hardwoods. See <http://water.epa.gov/type/wetlands/bottomland.cfm>.

7. Would it be possible to get shape files that show the JPA boundary for each component and shape files that show the JD boundaries for each component? And shape files that show wetland, stream, and open water resources in each jurisdictional determination area (include type of wetland, e.g. palustrine forested wetland, palustrine emergent wetland, where available)?

Duke Energy Response:

Shapefiles for the JPA boundaries, the JD boundaries, and the jurisdictional features (wetlands, streams, and open water) are provided (see Enclosure 2). Please note that the permit boundaries for the offsite transmission lines (PACs D and E) correspond to the 1000-ft corridors that include the 325-ft and 200-ft right-of-ways. Delineation of waters of the U.S. was not conducted outside of the right-of-ways. All work that may affect waters of the U.S. will be completed within the 325-ft and 200-ft right-of-ways. Additionally, only the permit area component boundaries are provided for the offsite road improvements. These areas were reviewed in the field and found not to contain waters of the U.S. Wetland types are not available for JD shapefiles. The functional assessment was conducted during the permit application preparation with assessments conducted on wetland polygons identified during the JD. Some of these polygons had two NCWAM wetland types resulting in the JD wetland being

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split into two wetland polygons for the permit application. Therefore, each wetland identified in the JD does not necessarily have only one NCWAM wetland type and these data are not available.

8. USACE Comment:

Could Duke provide plans that show the JD boundary for each component with the streams and open waters shown, with the jd acreage of the open waters next to the open waters, and with the wetlands shown on them with the jd acreage next to each wetland?

Duke Energy Response:

A series of maps providing the requested information is enclosed (see Enclosure 4).

9. USACE Comment:

Could Duke provide plans that show the JPA boundary for each component with the streams and open waters shown, with the jd acreage of the open waters next to the open waters, and with the wetlands shown on them with the JD acreage next to each wetland?

Duke Energy Response:

A series of maps providing the requested information is enclosed (see Enclosure 5).