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February 1, 2018

**VIA ELECTRONIC FILING**

Ms. M. Lynn Jarvis  
Chief Clerk  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, North Carolina 27699-4300

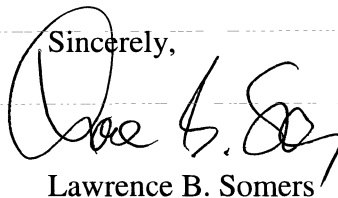
**RE: Duke Energy Carolinas, LLC's Report of Preconstruction Costs for  
Lee Nuclear Station Project Development Activities for the Period  
July 1, 2017 through December 31, 2017  
Docket No. E-7, Sub 819**

Dear Ms. Jarvis:

Pursuant to ordering paragraph 4 of the Commission's August 5, 2011 *Order Approving Decision to Incur Limited Project Development Costs*, I enclose Duke Energy Carolinas, LLC's Report of Preconstruction Costs for Lee Nuclear Station Project Development Activities for the period July 1, 2017 through December 31, 2017 for filing in connection with the referenced matter.

Thank you for your attention to this matter. If you have any questions, please let me know.

Sincerely,



Lawrence B. Somers

Enclosure

cc: Parties of Record

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**Preconstruction Costs for Lee Nuclear Station Project Development Activities**  
**January 1, 2011 - December 31, 2017**  
**February 1, 2018**

<b>Task Description</b>	<b>01/01/2011- 12/31/2016</b>	<b>01/01/2017- 6/30/2017</b>	<b>6/30/2017 – 12/31/2017</b>	<b>Project Totals to Date</b>
<b>COLA Preparation</b>	\$ (254,088)	\$ -	\$ -	\$ 25,067,000
<b>NRC Review &amp; Hearing Fees</b>	\$ 61,668,621	\$ 459,312	\$ -	\$ 110,488,035
<b>Land and Right-of-way Purchases</b>	\$ 1,601,087	\$ -	\$ -	\$ 44,341,359
<b>Pre-construction and Site Preparation</b>	\$ 1,673,893	\$ 14,115	\$ -	\$ 21,687,392
<b>Supply Chain, Construction Planning, and Detailed Engineering</b>	\$ 57,675,449	\$ 60,476	\$ -	\$ 79,943,701
<b>Operational Planning</b>	\$ 3,658,280	\$ 16,793	\$ -	\$ 4,794,175
<b>Post COL</b>	\$ -	\$ 1,541,284	\$ 408,622	\$ 1,949,906
<b>Allocate</b>	\$ 12,983,184	\$ 144,254	\$ -	\$ 22,237,518
<b>AFUDC</b>	\$ 172,449,346	\$26,364,583	\$ 9,209,699	\$ 247,607,083
<b>Total</b>	\$ 311,455,772	\$28,600,817	\$ 9,618,321	\$ 558,116,168

The activities included in each category are as follows:

**COLA Preparation** – includes Duke labor, expenses and contract support for preparation of the Combined Construction and Operating License (COL) Application tendered to the Nuclear Regulatory Commission (NRC) on December 13, 2007. The NRC determined the application was suitable for review and docketed the application on February 25, 2008.

**NRC Review and Hearing Fees** – includes the cost of the NRC review fees, Duke labor and expenses, contract labor and legal support required to support the NRC review of the Lee Nuclear Station COL application, and preparation for the Advisory Committee on Reactor Safeguards Subcommittee Hearing. Category also includes interactions with South Carolina Department of Health and Environmental Control (SCDHEC) and the US Army Corps of Engineers (USACE), as required to move the environmental permit applications forward. The Lee project received the National Pollutant Discharge Elimination System (NPDES) Operations permit on July 17, 2013. The Final Environmental Impact Statement was issued by the NRC on December 23, 2013, and the 401 Water Quality Certification was issued on January 2, 2014. The Final Environmental Impact Statement prepared by the U.S. Forest Service to support mitigation activities in Sumter National Forest was issued on December 5, 2014. Lee Nuclear Station received its USACE 404 Permit on September 29, 2015.

**Land and Right-of-Way Purchases** – includes the purchase of land required for the Lee site and rail right-of-ways. Category also includes cost of purchasing additional land for a supplemental cooling pond in event of severe drought, as well as costs for surveying the selected transmission right-of-way.

**Preconstruction Costs for Lee Nuclear Station Project Development Activities**  
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**Pre-construction and Site Preparation** – includes site activities to both maintain the site and prepare the site for construction. Site preparation activities included: dewatering and cleanup of the excavated area, site remediation activities required to identify and properly dispose of hazardous wastes, and costs associated with the demolition and removal of unusable structures. Necessary maintenance of existing rail bed and required Make-up Pond B spillway repair were completed. Engineering of offsite infrastructure for potable water, sewer, and rail spur; and, geotechnical evaluations (needed for engineering) have been completed. Engineering for bringing communications to the site is also included in this category. Engineering of necessary traffic improvements was brought to 85% completion by December 2013. Ongoing and continuing activities include: site security, utilities and miscellaneous site maintenance.

**Supply Chain, Construction Planning and Engineering** – includes activities associated with working with the supplier to negotiate an Engineering, Procurement and Construction (EPC) agreement. Negotiations in 2008 did not result in an executed contract. Conceptual site specific engineering and construction planning activities necessary to develop a complete project definition are included in this category. Continuing construction planning activities serve to further develop construction plans and keep the construction plans in line with latest engineering. Detailed site specific engineering began in January 2011 and was brought to 70% completion in December 2013. Commercial building design activities started in June 2012. Design of the first six commercial buildings was completed in December 2013.

**Operational Planning** – includes activities associated with operator and plant staff training, including costs associated with the Knowledge and Abilities Catalog, required for operator license examinations for AP1000 plants, and the standardization of the nomenclature in the Westinghouse Master Equipment List (MEL). Continuing activities include: supporting operations program development, such as Quality Assurance (QA) Program, and the review of approximately 500 procedures. The training materials, operational programs, and operating procedures are all being developed in concert with other AP1000 utilities within the APOG framework. The *Operational Planning* category also includes generation of administrative procedures that must be in place upon receipt of COL from NRC.

**Post COL** – A Combined Construction Permit and Operating License (COL) was received for the Lee AP1000 Project in December 2016. Design finalization and first-of-a-kind construction issues at the lead plants (Summer 2 and 3, Vogtle 3 and 4) required Westinghouse to make numerous changes to the AP1000 design. Design changes were issued as the lead plants advanced towards completion. License change packages were assembled to start the process of aligning the Lee COL with the lead plant COL. Construction of the Summer units was cancelled by the owners in 2017. Duke Energy Carolinas filed its Request for Approval to Cancel the Lee Nuclear Project on August 25, 2017 in Docket Nos. E-7, Sub 819 and E-7, Sub 1146. Submittal of an annual FSAR update and recurring regulatory reporting are required to maintain the COL.

**Allocate** – Labor burdens and allocated labor. This category had previously been manually spread to create the NCUC report. It has been determined that it is more accurate to show these charges in a separate bucket.

**Preconstruction Costs for Lee Nuclear Station Project Development Activities**  
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**February 1, 2018**

\*Charges for LCOLAEPC (Engineering, Procurement and Construction Release to COL) are now being reported in Supply Chain, Construction Planning, and Detailed Engineering.

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CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Carolinas, LLC's Report of Preconstruction Costs for Lee Nuclear Station Project Development Activities, in Docket No. E-7, Sub 819, has been served by electronic mail, hand delivery, or by depositing a copy in the United States Mail, 1<sup>st</sup> Class Postage Prepaid, properly addressed to the following parties of record:

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This the 1<sup>st</sup> day of February, 2018.



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