

Heather Shirley Smith Deputy General Counsel

Duke Energy 40 W. Broad Street Suite 690 Greenville, SC 29601

o: 864.370.5045 I: 864.370.5183 heather.smith@duke-energy.com

May 5, 2017

## VIA ELECTRONIC FILING

The Honorable Jocelyn G. Boyd Chief Clerk / Administrator Public Service Commission of South Carolina 101 Executive Center Drive, Suite 100 Columbia SC 29211

> Re: Amended Project Development Application of Duke Energy Carolinas, LLC for Approval of Decision to Incur Nuclear Generation Pre-Construction Costs PSCSC Docket No. 2011-20-E

Dear Mrs. Boyd:

Attached is the report of activities and expenditures for Lee Nuclear Station for the period ending March 31, 2017. The report is being filed late and I apologize that it was not submitted earlier this week.

Please contact me if you have any questions.

Sincerely,

Hack Aule Shill

cc: Mr. C. Dukes Scott, Office of Regulatory Staff
Ms. Nanette Edwards, Office of Regulatory Staff
Ms. Dawn Hipp, Office of Regulatory Staff
Ms. Shannon Bowyer-Hudson, Esq., Office of Regulatory Staff
Mr. Michael Seaman-Huynh, Office of Regulatory Staff
Parties of Record

## PSCSC Report Preconstruction Costs for Lee Nuclear Station Project Development Activities January 1, 2011 - March 31, 2017

Task Description	01/01/2011 - 12/31/2016	01/01/2017 - 3/31/2017	01/01/2011 - 3/31/2017	Project Totals to Date
COLA Preparation and Maintenance	0	697,374	697,734	28,379,574
NRC Review & Hearing Fees	71,194,772	298,784	71,493,556	125,185,732
Land and Right-of-way Purchases	1,626,814	0	1,626,814	44,931,125
Pre-construction and Site Preparation	25,291,910	16,080	25,307,990	46,933,814
Supply Chain, Construction Planning, and Detailed Engineering	34,350,951	10,079	34,361,030	56,590,877
Operational Planning	5,313,820	23,744	5,337,564	6,889,169
AFUDC	172,449,346	9,842,119	182,291,465	221,874,919
Total	310,227,615	10,888,180	321,115,794	530,785,210

The activities included in each category are as follows:

**COLA Preparation and Maintenance** – includes Duke Energy labor, expenses and contract support for preparation of the Combined Construction and Operating License (COL) Application tendered to the Nuclear Regulatory Commission (NRC) on 12/13/07. The NRC determined the application was suitable for review and docketed the application on 02/25/08. Duke received the Lee COL in December 2016. A COL application scope freeze instituted in 2008, resulted in a significant backlog of changes that were deferred for post-COL inclusion into the Lee licensing basis. In 2017, Duke began the process of implementing the changes required to get the Lee COL aligned with the current AP1000 design.

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 (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 401Water 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.

**Pre-construction and Site Preparation** – includes site activities to both prepare the site for construction and maintain the site. 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.