

LAW OFFICE OF  
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**OFFICIAL COPY**

February 10, 2011

Ms. Renné C. Vance, Chief Clerk  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, North Carolina 27699-4325

**FILED**  
FEB 10 2011  
Clerk's Office  
N.C. Utilities Commission

RE: Docket No. E-7, Sub 856

Dear Ms. Vance:

Enclosed for filing are the original and thirty (30) copies of Duke Energy Carolinas, LLC's 2010 Annual Cost Update in the above referenced docket.

We are filing 14 PUBLIC versions and 17 CONFIDENTIAL versions are being filed under seal.

Sincerely,



Robert W. Kaylor

Encls.

cc: Parties of Record

(20)  
a/c  
Duke  
Elec 3  
Water 3  
E-7  
Elect 3

**DOCKET NO. E-7, SUB 856**  
**DUKE ENERGY CAROLINAS, LLC'S 2010 ANNUAL COST UPDATE**

**OFFICIAL COPY**

As of January 31, 2011, Duke Energy Carolinas, LLC ("Duke Energy Carolinas" or "the Company") has completed phases I and III of the NC Solar PV DG program ("the Program"), approved in the North Carolina Utilities Commission's *Order Granting Certificate of Public Convenience and Necessity With Conditions* in the above-referenced docket, securing 16 commercial, 7 residential and 2 Company sites with an aggregate capacity of 9,942 kilowatt (kW) DC. Minor additional work still remains to be completed on Phase II of the Program. Phase I focused on identifying, constructing and installing a small number of larger systems (500-1,500 kW), with generally longer construction times. Phase II involved the acquisition and installation of small to mid-range systems (50-500 kW), with one larger system (2,200 kW) and an R&D site at Marshall Steam Station (1,025 kW). Phase III included the acquisition and installation of small residential systems (2.3 kW) with a total of 7 home sites built out (15.87 kW total). The Company had targeted October 31, 2010 as the completion date for Phases II and III, but a worldwide shortage of critical components, specifically inverters, resulted in a delay in the majority of kW's being commercial until December, 2010, with another 110 kW added by January, 2011. Promising advances in technology through Concentrated Photovoltaics ("CPV") and use of lighter materials may provide opportunities to add some additional capacity at the R&D site. Costs for invoices received after December 2010, remaining work to complete Phase II and additional capacity planned for the Marshall R&D site will be included in future filings.

Sites overview:

	Site	In Service Date	kW Size (DC)	Est. PV Watts Annual Output (AC MWh)
Phase I	National Gypsum	29-JAN-10	1,208	1,590
	Childress Klein	31-JAN-10	532	700
	Highwoods	01-APR-10	1,495	1,968
	Food Lion	10-MAY-10	1,090	1,435
	McAlpine	15-MAY-10	50	72
Phase II	Carrier Centers	03-NOV-10	528	695
	Lincoln Charter School	13-AUG-10	161	212
	Gaston County Schools	07-MAY-10	71	93
	City of Charlotte	19-AUG-10	113	148
	EPA	13-APR-10	109	144
	Freightliner	29-DEC-10	358	515
	Siemens	15-NOV-10	52	74
	Childress Klein	15-OCT-10	2,174	2,861
	Liberty Hardware	01-SEP-10	309	407
	Maple View Agricultural	01-SEP-10	180	259
	Kimberly Clark	27-OCT-10	84	120
	Thomas Built Buses	29-NOV-10	388	558
	Marshall	29-DEC-10	915	1,613
		27-JAN-11	110	
Phase III	Residential	31-DEC-10	16	21
			9,942	13,485

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DUKE ENERGY CAROLINAS, LLC'S 2010 ANNUAL COST UPDATE  
PUBLIC VERSION

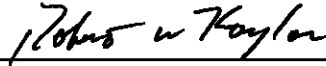
Costs Incurred In 2009	Highwoods	Food Lion	Childress Klein	Nation Gypsum	McAlpine	Total Costs															
Panels & Equipment	12,124,776	1,250,000	1,250,000	1,250,000	1,250,000	12,124,776															
Installation Costs	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000															
Total	13,374,776	2,500,000	2,500,000	2,500,000	2,500,000	13,374,776															
Costs Incurred In 2010							EPA	Gaston C. Sch.	Lincoln CS	Carver Center	City of CLT	Siemens	Liberty NW	CK II	Maple View	Kimberly Clark	Freightliner	TBB	Marshall	Residential	Total Costs
Panels & Equipment	12,124,776	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	12,124,776	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	12,124,776
Installation Costs	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000
Total	13,374,776	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	13,374,776	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	13,374,776
Site totals	13,374,776	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	13,374,776	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	13,374,776

Costs do not include AFUDC

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Carolinas, LLC's 2010 Annual Cost Update in Docket No. E-7, Sub 819 has been served by electronic mail (e-mail), hand delivery or by depositing a copy in the United States Mail, first class postage prepaid, properly addressed to parties of record.

This the 10<sup>th</sup> day of February, 2011.

A handwritten signature in black ink, reading "Robert W. Kaylor", is written over a horizontal line.

Robert W. Kaylor  
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