



**NORTH CAROLINA  
PUBLIC STAFF  
UTILITIES COMMISSION**

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September 1, 2009

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

RE: Docket No. E-7, Sub 831  
Duke Energy Carolinas, LLC

Dear Ms. Vance:

On August 28, 2009, Duke Energy Carolinas, LLC (Duke), filed its Late-Filed Exhibits in the above-referenced docket. The proposed allocation methodology is not settled in this proceeding. Therefore, the Public Staff has enclosed in this response to Duke's August 28, 2009 filing, Maness Exhibits 7 and 8, reflecting the Public Staff's proposed allocation methodology.

Yours very truly,

Kendrick C. Fentress  
Staff Attorney

KCF/bll

Enclosures

cc: Parties of Record

Executive Director  
733-2435

Communications  
733-2810

Economic Research  
733-2902

Legal  
733-6110

Transportation  
733-7766

Accounting  
733-4279

Consumer Services  
733-9277

Electric  
733-2267

Natural Gas  
733-4326

Water  
733-5610

MH  
AG  
7 Comm.  
Bennink  
Isby  
Watson  
Hoover  
Sessions  
Kite  
Ericson  
Jones

**DUKE ENERGY CAROLINAS, LLC**

Docket No. E-7, Sub 831

**NOMINAL TOTAL PROGRAM COSTS BY VINTAGE****NORTH CAROLINA RETAIL AMOUNTS - PER PUBLIC STAFF RECOMMENDED ALLOCATION FACTORS****(\$ IN MILLIONS)**

Line No.	Item / Program Name	Costs (1) (3)				
		<b>Administration</b>				
		<b>Total</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>
1.	Total Administration	\$37.9	\$4.4	\$5.4	\$10.6	\$17.6
		<b>Implementation / Assessments</b>				
		<b>Total</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>
2.	Energy Efficiency Education Program for Schools	\$19.1	\$1.6	\$2.3	\$5.6	\$9.6
3.	Low Income Services	\$13.9	\$1.1	\$1.6	\$3.8	\$7.4
4.	Power Manager	\$0.6	\$0.1	\$0.1	\$0.1	\$0.1
5.	PowerShare	\$1.0	\$0.4	\$0.2	\$0.2	\$0.2
6.	Residential Energy Assessments	\$8.8	\$1.2	\$1.3	\$2.6	\$3.8
7.	Residential Smart Saver Energy Efficient Products	\$5.1	\$1.2	\$1.3	\$1.1	\$1.5
8.	Smart Saver for Non-Residential Customers	\$15.4	\$2.1	\$2.2	\$4.4	\$6.6
9.	Total Implementation / Assessments	\$64.0				
		<b>Incentives Paid to Participants</b>				
		<b>Total</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>
10.	Energy Efficiency Education Program for Schools	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
11.	Low Income Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
12.	Power Manager	\$16.9	\$4.2	\$4.2	\$4.2	\$4.2
13.	PowerShare	\$31.0	\$2.7	\$6.9	\$10.7	\$10.7
14.	Residential Energy Assessments	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
15.	Residential Smart Saver Energy Efficient Products	\$12.3	\$1.9	\$2.1	\$3.2	\$5.1
16.	Smart Saver for Non-Residential Customers	\$26.9	\$3.4	\$3.8	\$7.8	\$11.9
17.	Total Incentives Paid to Participants	\$87.1				
		<b>Total Program Costs</b>				
		<b>Total</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>
18.	Total Program Costs (1)	\$189.0	\$24.4	\$31.6	\$54.3	\$78.7
		<b>Pre-Tax Company Incentive</b>				
		<b>Total</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>
19.	Total Pre-tax Company Incentive (2) (4)	\$ 45.9	\$ 9.4	\$ 10.7	\$ 11.8	\$ 14.0

**Notes:**

(1) Total program costs are based on 100% achievement.

(2) Pre-tax company incentive is equal to NC revenues less program costs, not including gross receipts tax or regulatory fee, at 100% achievement, and does not include net lost revenues.

(3) Used the Public Staff's proposed allocation factor to calculate state specific costs:

(a) Energy Efficiency (EE) Allocation	68.3874%
(NC Retail kWh Sales / System kWh Sales)	
(b) Demand Side Management (DSM) Allocation	69.9278%
(NC Retail Peak Demand / System Peak Demand)	

(4) Calculation of the Company's total pre-tax incentive using the Public Staff's proposed allocation methodology:

Revenues Calculated from Maness Exhibit 2 at 85% Achievement	Year 1	Year 2	Year 3	Year 4
Residential Avoided Cost Revenue Requirement (5)	\$ 11.5	\$ 14.5	\$ 22.5	\$ 31.2
Non-Residential Avoided Cost Revenue Requirement (5)	\$ 17.2	\$ 21.5	\$ 33.8	\$ 47.5
Total Revenues at 85% Achievement	\$ 28.7	\$ 35.9	\$ 56.3	\$ 78.8
Revenues Increased to 100% Achievement	\$ 33.8	\$ 42.2	\$ 66.2	\$ 92.7
Less Total Program Costs	\$ 24.4	\$ 31.6	\$ 54.3	\$ 78.7
Pre-tax Company Incentive	\$ 9.4	\$ 10.7	\$ 11.8	\$ 14.0

(5) Under the Public Staff's recommended allocation methodology, the revenues associated with each type of program are not assigned to the group of customers (residential or non-residential) for purposes of rider calculation. Instead, total EE revenues are allocated on the basis of customer group energy sales, and total DSM revenues are allocated on the basis of contribution to peak load. Please see Maness Exhibit 2 for the Public Staff's calculation of estimated annual riders.

## DUKE ENERGY CAROLINAS, LLC

Docket No. E-7, Sub 831

## NOMINAL TOTAL AVOIDED COSTS BY VINTAGE

## NORTH CAROLINA RETAIL AMOUNTS - PER PUBLIC STAFF RECOMMENDED ALLOCATION FACTORS

Energy Efficiency Allocation 0.6838736  
Demand Side Management Allocation 0.6992775

Line No.	Projected Avoided Capacity and Energy Costs			Year					All Years			
	Nominal Avoided Capacity Costs by Vintage			Total	1	2	3	4	% EE	% DSM		
1.	<u>Residential Programs</u>											
2.	Energy Efficiency Education program for Schools	\$	24,871,971	\$	1,934,866	\$	2,933,154	\$	7,305,306	\$	12,698,644	100%
3.	Low Income Energy Efficiency and Weatherization Assistance	\$	6,334,298	\$	898,336	\$	992,789	\$	1,713,174	\$	2,729,998	100%
4.	Residential Energy Assessments	\$	6,921,212	\$	860,920	\$	969,550	\$	2,008,579	\$	3,082,162	100%
5.	Residential Smart Saver® Energy Efficiency	\$	11,523,748	\$	2,299,984	\$	2,599,354	\$	2,593,686	\$	4,030,723	100%
6.	Total Residential Energy Efficiency Avoided Capacity Costs	\$	49,651,226	\$	5,994,107	\$	7,494,847	\$	13,620,744	\$	22,541,528	
7.	Power Manager	\$	50,736,675	\$	12,218,298	\$	12,523,756	\$	12,836,850	\$	13,157,771	100%
8.	Total Residential Avoided Capacity Costs	\$	100,387,900	\$	18,212,405	\$	20,018,602	\$	26,457,594	\$	35,699,299	
9.	<u>Non-Residential Programs</u>											
10.	Non-Residential Energy Assessments	\$	-	\$	-	\$	-	\$	-	\$	-	100%
11.	Smart Saver® for Non-Residential Customers	\$	52,760,004	\$	5,969,438	\$	7,115,240	\$	15,345,083	\$	24,330,242	100%
12.	Total Non-Residential Energy Efficiency Avoided Capacity Costs	\$	52,760,003	\$	5,969,438	\$	7,115,240	\$	15,345,083	\$	24,330,242	
13.	Power Share®	\$	51,938,866	\$	4,303,425	\$	11,411,093	\$	17,888,566	\$	18,335,780	100%
14.	Total Non-Residential Avoided Capacity Costs	\$	104,698,868	\$	10,272,863	\$	18,526,333	\$	33,233,650	\$	42,666,023	
15.	Total Energy Efficiency Avoided Capacity Costs	\$	102,411,229	\$	11,963,545	\$	14,610,086	\$	28,965,828	\$	46,871,770	
16.	Total DSM Avoided Capacity Costs	\$	102,675,539	\$	16,521,723	\$	23,934,849	\$	30,725,416	\$	31,493,551	
17.	Total Avoided Capacity Costs	\$	205,086,768	\$	28,485,268	\$	38,544,935	\$	59,691,244	\$	78,365,321	
18.	Percent of Avoided Capacity Costs for Energy Efficiency Programs		49.9%		42.0%		37.9%		48.5%		59.8%	
19.	Percent of Avoided Capacity Costs for DSM Programs		50.1%		58.0%		62.1%		51.5%		40.2%	
20.	<u>Nominal Avoided Energy Costs by Vintage</u>											
21.	<u>Residential Programs</u>											
22.	Energy Efficiency Education program for Schools	\$	73,778,809	\$	7,428,068	\$	9,185,798	\$	21,284,091	\$	35,880,851	100%
23.	Low Income Energy Efficiency and Weatherization Assistance	\$	35,076,516	\$	5,077,891	\$	5,390,437	\$	9,366,492	\$	15,241,695	100%
24.	Residential Energy Assessments	\$	30,896,428	\$	3,720,595	\$	4,123,113	\$	8,842,446	\$	14,210,274	100%
25.	Residential Smart Saver® Energy Efficiency	\$	57,958,037	\$	12,315,777	\$	13,476,860	\$	12,455,299	\$	19,710,100	100%
26.	Total Residential Energy Efficiency Avoided Energy Costs	\$	197,709,786	\$	28,542,331	\$	32,176,207	\$	51,948,328	\$	85,042,919	
27.	Power Manager	\$	-	\$	-	\$	-	\$	-	\$	-	100%
28.	Total Residential Avoided Energy Costs	\$	197,709,786	\$	28,542,331	\$	32,176,207	\$	51,948,328	\$	85,042,919	

## DUKE ENERGY CAROLINAS, LLC

Docket No. E-7, Sub 831

## NOMINAL TOTAL AVOIDED COSTS BY VINTAGE

## NORTH CAROLINA RETAIL AMOUNTS - PER PUBLIC STAFF RECOMMENDED ALLOCATION FACTORS

Energy Efficiency Allocation 0.6838736  
Demand Side Management Allocation 0.6992775

Line No.	Projected Avoided Capacity and Energy Costs Nominal Avoided Capacity Costs by Vintage	Total	Year					All Years	
			1	2	3	4		% EE	% DSM
29.	<u>Non-Residential Programs</u>								
30.	Non-Residential Energy Assessments	\$ -	\$ -	\$ -	\$ -	\$ -		100%	
31.	Smart Saver® for Non-Residential Customers	\$ 114,840,268	\$ 14,050,720	\$ 15,834,400	\$ 33,205,927	\$ 51,749,220		100%	
32.	Total Non-Residential Energy Efficiency Avoided Energy Costs	\$ 114,840,267	\$ 14,050,720	\$ 15,834,400	\$ 33,205,927	\$ 51,749,220			
33.	Power Share®	\$ -	\$ -	\$ -	\$ -	\$ -			100%
34.	Total Non-Residential Avoided Energy Costs	\$ 114,840,267	\$ 14,050,720	\$ 15,834,400	\$ 33,205,927	\$ 51,749,220			
35.	Total Energy Efficiency Avoided Energy Costs	\$ 312,550,053	\$ 42,593,051	\$ 48,010,608	\$ 85,154,255	\$ 136,792,139			
36.	Total DSM Avoided Energy Costs	\$ -	\$ -	\$ -	\$ -	\$ -			
37.	Total Avoided Energy Costs	\$ 312,550,053	\$ 42,593,051	\$ 48,010,608	\$ 85,154,255	\$ 136,792,139			
38.	Percent of Avoided Energy Costs for Energy Efficiency Programs	100.0%	100.0%	100.0%	100.0%	100.0%			
39.	Percent of Avoided Energy Costs for DSM Programs	0.0%	0.0%	0.0%	0.0%	0.0%			
40.	<u>Nominal Total Avoided Costs by Vintage</u>								
41.	<u>Residential Programs</u>								
42.	Energy Efficiency Education program for Schools	\$ 98,650,780	\$ 9,362,934	\$ 12,118,952	\$ 28,589,397	\$ 48,579,494		100%	
43.	Low Income Energy Efficiency and Weatherization Assistance	\$ 41,410,815	\$ 5,976,227	\$ 6,383,226	\$ 11,079,666	\$ 17,971,693		100%	
44.	Residential Energy Assessments	\$ 37,817,640	\$ 4,581,514	\$ 5,092,663	\$ 10,851,025	\$ 17,292,436		100%	
45.	Residential Smart Saver® Energy Efficiency	\$ 69,481,785	\$ 14,615,762	\$ 16,076,213	\$ 15,048,985	\$ 23,740,823		100%	
46.	Total Residential Energy Efficiency Avoided Costs	\$ 247,361,012	\$ 34,536,438	\$ 39,671,054	\$ 65,569,073	\$ 107,584,447			
47.	Power Manager	\$ 50,736,675	\$ 12,218,298	\$ 12,523,756	\$ 12,836,850	\$ 13,157,771			100%
48.	Total Residential Avoided Costs	\$ 298,097,686	\$ 46,754,736	\$ 52,194,810	\$ 78,405,922	\$ 120,742,218			
49.	<u>Non-Residential Programs</u>								
50.	Non-Residential Energy Assessments	\$ -	\$ -	\$ -	\$ -	\$ -		100%	
51.	Smart Saver® for Non-Residential Customers	\$ 167,600,272	\$ 20,020,158	\$ 22,949,640	\$ 48,551,010	\$ 76,079,462		100%	
52.	Total Non-Residential Energy Efficiency Avoided Costs	\$ 167,600,270	\$ 20,020,158	\$ 22,949,640	\$ 48,551,010	\$ 76,079,462			
53.	Power Share®	\$ 51,938,866	\$ 4,303,425	\$ 11,411,093	\$ 17,888,566	\$ 18,335,780			100%
54.	Total Non-Residential Avoided Costs	\$ 219,539,135	\$ 24,323,583	\$ 34,360,733	\$ 66,439,577	\$ 94,415,242			
55.	Total Energy Efficiency Avoided Costs	\$ 414,961,282	\$ 54,556,596	\$ 62,620,694	\$ 114,120,083	\$ 183,663,909			
56.	Total DSM Avoided Costs	\$ 102,675,539	\$ 16,521,723	\$ 23,934,849	\$ 30,725,416	\$ 31,493,551			
57.	Total Avoided Costs	\$ 517,636,821	\$ 71,078,319	\$ 86,555,543	\$ 144,845,499	\$ 215,157,460			
58.	Percent of Avoided Costs for Energy Efficiency Programs	80.2%	76.8%	72.3%	78.8%	85.4%			
59.	Percent of Avoided Costs for DSM Programs	19.8%	23.2%	27.7%	21.2%	14.6%			

**DUKE ENERGY CAROLINAS, LLC**  
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**NORTH CAROLINA RETAIL AMOUNTS - PER PUBLIC STAFF RECOMMENDED ALLOCATION FACTORS**

Energy Efficiency Allocation                      0.6838736  
Demand Side Management Allocation            0.6992775

Line No.	Projected Avoided Capacity and Energy Costs	Year				All Years		
	Nominal Avoided Capacity Costs by Vintage	Total	1	2	3	4	% EE	% DSM
Avoided Capacity Costs as Percent of Total Avoided Costs								
60.	Residential Programs							
61.	Energy Efficiency Education program for Schools	25.2%	20.7%	24.2%	25.6%	26.1%		
62.	Low Income Energy Efficiency and Weatherization Assistance	15.3%	15.0%	15.6%	15.5%	15.2%		
63.	Residential Energy Assessments	18.3%	18.8%	19.0%	18.5%	17.8%		
64.	Residential Smart Saver® Energy Efficiency	16.6%	15.7%	16.2%	17.2%	17.0%		
65.	Total Residential Energy Efficiency Avoided Costs	20.1%	17.4%	18.9%	20.8%	21.0%		
66.	Power Manager	100.0%	100.0%	100.0%	100.0%	100.0%		
67.	Total Residential Avoided Costs	33.7%	39.0%	38.4%	33.7%	29.6%		
Non-Residential Programs								
68.	Non-Residential Energy Assessments							
70.	Smart Saver® for Non-Residential Customers	31.5%	29.8%	31.0%	31.6%	32.0%		
71.	Total Non-Residential Energy Efficiency Avoided Costs	31.5%	29.8%	31.0%	31.6%	32.0%		
72.	Power Share®	100.0%	100.0%	100.0%	100.0%	100.0%		
73.	Total Non-Residential Avoided Costs	47.7%	42.2%	53.9%	50.0%	45.2%		
74.	Total Energy Efficiency Avoided Costs	24.7%	21.9%	23.3%	25.4%	25.5%		
75.	Total DSM Avoided Costs	100.0%	100.0%	100.0%	100.0%	100.0%		
76.	Total Avoided Costs	39.6%	40.1%	44.5%	41.2%	36.4%		
Avoided Energy Costs as Percent of Total Avoided Costs								
78.	Residential Programs							
79.	Energy Efficiency Education program for Schools	74.8%	79.3%	75.8%	74.4%	73.9%		
80.	Low Income Energy Efficiency and Weatherization Assistance	84.7%	85.0%	84.4%	84.5%	84.8%		
81.	Residential Energy Assessments	81.7%	81.2%	81.0%	81.5%	82.2%		
82.	Residential Smart Saver® Energy Efficiency	83.4%	84.3%	83.8%	82.8%	83.0%		
83.	Total Residential Energy Efficiency Avoided Costs	79.9%	82.6%	81.1%	79.2%	79.0%		
84.	Power Manager	0.0%	0.0%	0.0%	0.0%	0.0%		
85.	Total Residential Avoided Costs	66.3%	61.0%	61.6%	66.3%	70.4%		
Non-Residential Programs								
87.	Non-Residential Energy Assessments							
88.	Smart Saver® for Non-Residential Customers	68.5%	70.2%	69.0%	68.4%	68.0%		
89.	Total Non-Residential Energy Efficiency Avoided Costs	68.5%	70.2%	69.0%	68.4%	68.0%		
90.	Power Share®	0.0%	0.0%	0.0%	0.0%	0.0%		
91.	Total Non-Residential Avoided Costs	52.3%	57.8%	46.1%	50.0%	54.8%		
92.	Total Energy Efficiency Avoided Costs	75.3%	78.1%	76.7%	74.6%	74.5%		
93.	Total DSM Avoided Costs	0.0%	0.0%	0.0%	0.0%	0.0%		
94.	Total Avoided Costs	60.4%	59.9%	55.5%	58.8%	63.6%		

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Energy Efficiency Allocation                      0.6838736  
Demand Side Management Allocation            0.6892775

Line No.	Projected Avoided Capacity and Energy Costs Nominal Avoided Capacity Costs by Vintage	Total	Year				All Years	
			1	2	3	4	% EE	% DSM
95.	<b>Present Value of Total Avoided Costs by Vintage<sup>1</sup></b>							
96.	<b>Residential Programs</b>		1	2	3	4		
97.	Energy Efficiency Education program for Schools	\$ 7,995,739	\$ 10,166,174	\$ 23,760,911	\$ 40,058,846			
98.	Low Income Energy Efficiency and Weatherization Assistance	\$ 5,100,095	\$ 5,323,474	\$ 8,959,695	\$ 14,114,216			
99.	Residential Energy Assessments	\$ 3,903,143	\$ 4,311,433	\$ 9,171,218	\$ 14,561,190			
100.	Residential Smart Saver® Energy Efficiency	\$ 12,108,098	\$ 13,187,372	\$ 11,347,670	\$ 17,651,179			
101.	Total Residential Energy Efficiency Avoided Costs	\$ 29,107,075	\$ 32,988,453	\$ 53,239,493	\$ 86,385,431			
102.	Power Manager	\$ 12,218,298	\$ 12,523,756	\$ 12,836,850	\$ 13,157,771			
103.	Total Residential Avoided Costs	\$ 41,325,374	\$ 45,512,208	\$ 66,076,343	\$ 99,543,202			
104.	<b>Non-Residential Programs</b>							
105.	Non-Residential Energy Assessments	\$ -	\$ -	\$ -	\$ -			
106.	Smart Saver® for Non-Residential Customers	\$ 13,652,036	\$ 15,586,778	\$ 33,049,002	\$ 51,769,257			
107.	Total Non-Residential Energy Efficiency Avoided Costs	\$ 13,652,036	\$ 15,586,778	\$ 33,049,002	\$ 51,769,257			
108.	Power Share®	\$ 4,303,425	\$ 11,411,093	\$ 17,888,566	\$ 18,335,780			
109.	Total Non-Residential Avoided Costs	\$ 17,955,461	\$ 26,997,871	\$ 50,937,568	\$ 70,105,038			
110.	Total Energy Efficiency Avoided Costs	\$ 42,759,112	\$ 48,575,231	\$ 86,288,495	\$ 138,154,688			
111.	Total DSM Avoided Costs	\$ 16,521,723	\$ 23,934,849	\$ 30,725,416	\$ 31,493,551			
112.	Total Avoided Costs	\$ 59,280,835	\$ 72,510,079	\$ 117,013,911	\$ 169,648,240			

{1} This table shows the present value of avoided costs by vintage (i.e. all totals in vintage 2 have been discounted back to year two). Therefore, revenues can be calculated for each year by multiplying the totals in each vintage by the appropriate avoided cost percentage and then by 85% to equal revenues shown in Farmer Exhibit 3. For example, to calculate revenues for year 2:

	Year 2 Avoided Cost	Avoided Cost %	Billing %	Revenues
Total Energy Efficiency Program Avoided Costs	\$ 48,575,231	50%	85%	\$ 20,644,473
Total DSM Program Avoided Costs	\$ 23,934,849	75%	85%	\$ 15,258,466
Total	\$ 72,510,079			\$ 35,902,939

Calculated from Amounts per Maness Exhibit 2:	Year 2
Residential Avoided Cost Revenue Requirement (2)	\$ 14,452,774
Non-Residential Avoided Cost Revenue Requirement (2)	\$ 21,450,311
Total (Not Including Net Lost Revenues, GRT, or regulatory fee)	\$ 35,903,085
Rounding Difference	\$ (146)

(2) Under the Public Staff's recommended allocation methodology, the revenues associated with each type of program are not assigned to the group of customers (residential or non-residential) for purposes of rider calculation. Instead, total EE revenues are allocated on the basis of customer group energy sales, and total DSM revenues are allocated on the basis of contribution to peak load. Please see Maness Exhibit 2 for the Public Staff's calculation of estimated annual riders.