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June 6, 2008

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Sessions*

**FILED**

**JUN 06 2008**

Clerk's Office  
N.C. Utilities Commission

Ms. Renne Vance  
Chief Clerk  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, NC 27600

RE: Docket No. E-2, Sub 931

Dear Ms. Vance:

Please find enclosed for filing in the above-referenced docket the original and 30 copies of Progress Energy Carolinas, Inc.'s Application for Approval of DSM and Energy Efficiency Cost Recovery Rider, the Direct Testimony of Robert P. Evans and supporting documentation.

Sincerely,

*Len S. Anthony Inhm*

Len S. Anthony  
General Counsel-Progress Energy Carolinas

LSA:mhm

Enclosure

cc: Parties of Record

263731

*Clerk-as  
AG  
7Comm  
Hoover  
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Hilburn  
Ericson  
Jones  
E+Dir  
3/5Legal  
3/5Acctg  
2/5Ec/Kes  
3/5Elec*

STATE OF NORTH CAROLINA

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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 931

**FILED**

**JUN 06 2008**

Clerk's Office  
N.C. Utilities Commission

In the Matter of:	)	
	)	
Application by Progress Energy Carolinas,	)	APPLICATION FOR APPROVAL OF
Inc. For Authority to Adjust Its Electric	)	DSM AND ENERGY EFFICIENCY COST
Rates and Charges Pursuant to NC Gen.	)	RECOVERY RIDER
Statute § 62-133.9 and NCUC Rule R8-69	)	

COMES NOW, Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. (hereinafter "the Company") pursuant to N.C.G.S. § 62-133.9 and Rule R8-69 of the Rules and Regulations of the North Carolina Utilities Commission and applies to the Commission as follows:

1. The Company is a public utility operating in the states of North Carolina and South Carolina where it is engaged in the generation, transmission, distribution, and sale of electricity to the public for compensation. Its general offices are located at 410 S. Wilmington Street, Raleigh, North Carolina; and its mailing address is Post Office Box 1551, Raleigh, North Carolina 27602-1551.

2. The attorneys for the Company, to whom all communications and pleadings should be addressed, are:

Len S. Anthony  
Deputy General Counsel  
Progress Energy Services Company  
Post Office Box 1551  
Raleigh, North Carolina 27602-1551  
Telephone: (919) 546-6367

And

Dwight Allen  
3737 Glenwood Ave.  
Suite 100  
Raleigh, NC 27612  
Telephone: (919) 573-6103

3. N.C.G.S. § 62-133.9(d) authorizes the Commission to approve an annual rider to the rates of electric public utilities to recover all reasonable and prudent costs incurred for the adoption and implementation of new demand-side management and energy efficiency programs. Recoverable costs include, but are not limited to, all capital costs, including cost of capital and depreciation expense, administrative costs, implementation costs, incentive payments to program participants, and operating costs. Such rider shall consist of the utility's forecasted cost during the rate period and an experience modification factor ("EMF") rider to collect the difference between the utility's actual reasonable and prudent costs incurred during the test period and actual revenues realized during the test period. The Commission is also authorized to approve incentives to utilities for adopting and implementing new demand-side management and energy efficiency programs, including rewards based on the sharing of savings achieved by the programs.

4. Rule R8-69(b) provides the Commission will each year conduct a proceeding for each electric public utility to establish an annual DSM/EE rider to recover DSM/EE related costs.

5. According to Rule R8-69(e) the electric public utility is to file its application for recovery of DSM/EE costs at the same time it files the information required by Rule R8-55, and the Commission is to conduct an annual DSM/EE rider hearing as soon as practicable after the hearing required by Rule R8-55.

6. Pursuant to the provisions of N.C.G.S. §62-133.9 and NCUC Rule R8-69, the Company requests the establishment of a rider to recover its reasonable and prudent forecasted

DSM/EE costs, net lost revenues and additional incentive, to be incurred during the rate period, and an EMF, and pursuant to Commission Rule R8-69(b)(2), PEC requests to recover through the EMF its costs, including net lost revenues and an additional incentive incurred up to 30 days prior to the hearing in this proceeding. The additional incentive requested by PEC is an amount equal to 50% of the net benefits as determined by the Utility Cost Test as described in the direct testimony of Robert P. Evans. The rider and EMF are intended to allow PEC to recover \$3,273,285 of DSM/EE expenses and incentives incurred during the test period beginning August 21, 2007 through March 31, 2008; plus \$2,464,888 for expenses and incentives to be incurred during the prospective period from April 1, 2008 through July 31, 2008; and, \$36,864,860 for expenses and incentives to be incurred during the rate period from December 1, 2008 through November 30, 2009. The prospective period amount will be updated with actual amounts at least 30 days prior to the hearing date in this proceeding.

7. Pursuant to the provisions of N.C.G.S. §62-133.9 and NCUC Rule R8-69, the Company requests Commission approval of the annual billing adjustments as follows (all shown on a dollars per kWh basis with and without NC gross receipts taxes):

Rate Class	DSM/EE Rate		DSM/EE EMF Rate		Total Billing Impact	
	w/o NC GRT	w/ NC GRT	w/o NC GRT	w/ NC GRT	w/o NC GRT	w/ NC GRT
Residential	\$0.00165	\$0.00170	\$0.00025	\$0.00026	\$0.00190	\$0.00196
Small General Service	\$0.00167	\$0.00173	\$0.00025	\$0.00026	\$0.00192	\$0.00199
Medium General Service	\$0.00140	\$0.00145	\$0.00021	\$0.00022	\$0.00161	\$0.00167
Large General Service	\$0.00101	\$0.00104	\$0.00016	\$0.00017	\$0.00117	\$0.00121
Lighting	\$0.00037	\$0.00038	\$0.00007	\$0.00007	\$0.00044	\$0.00045
NC Retail	\$0.00157	\$0.00162	\$0.00024	\$0.00025	\$0.00181	\$0.00187

These rates are reflected in proposed Rider BA-1, a copy of which is included as Evans Exhibit No. 11, to recover the DSM/EE expenses described above. The DSM/EE EMF rider will be in effect for the twelve month period December 1, 2008 through November 30, 2009.

8. Pursuant to Commission Rule R8-69(b)(6) PEC requests approval to defer the difference between actual reasonable and prudently incurred incremental costs and the related revenues realized under rates in effect. FERC account 182.3, "Other Regulatory Assets", will be used to deferral these costs until recovered. In addition, to the extent that PEC has incurred incremental costs of implementing new demand-side management or energy efficiency measures more than six months prior to the filing of PEC's application for approval, PEC requests approval to defer those costs as allowed by Commission Rule R8-69(b)(6).

9. The Company has attached hereto PEC Exhibit No. 1 which contains information required by NCUC Rule R8-69. In addition, the Company has attached the direct testimony and exhibits of witness Robert P. Evans in support of the requested change in rates.

WHEREFORE, the Company respectfully prays:

That, consistent with this Application, the Commission approves the changes to its rates as set forth in paragraph 7 above.

Respectfully submitted this 6th day of June 2008.

PROGRESS ENERGY CAROLINAS, INC.

By: Len S. Anthony  
Len S. Anthony, General Counsel  
P. O. Box 1551, PEB 17A4  
410 South Wilmington Street  
Raleigh, NC 27602

STATE OF NORTH CAROLINA


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VERIFICATION

COUNTY OF WAKE

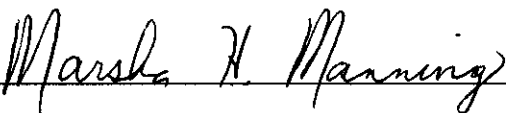
DOCKET NO. E-2, SUB 931

PERSONALLY APPEARED before me, Robert P. Evans who, after first being duly sworn, said that he is Senior Project Analyst at Progress Energy Carolinas, Inc. and as such is authorized to make this verification; that he has read the foregoing Application and knows the contents thereof; and that the same are true and correct to the best of his knowledge, information, and belief.



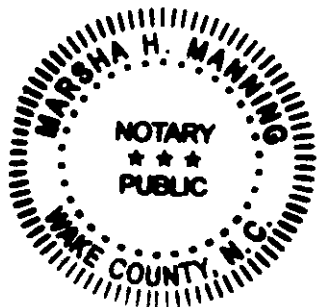
ROBERT P. EVANS

Sworn to and subscribed before me, this the 6th day of June 2008.



My Commission Expires:

10/03/2009



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**Progress Energy Carolinas, Inc**  
**Docket No. E-2, Sub 931**

**FILED**

**JUN 06 2008**

Clerk's Office  
N.C. Utilities Commission

# **Demand Side Management and Energy Efficiency Programs**

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# **Workpapers**

Pursuant to Commission Rule R8-69(f)(1)(viii)

June 6, 2008

# Workpapers

## Section A – Cost Summary



# North Carolina Retail - DSM/EE Revenue Requirements Summary

Test Period	Totals Before Incentive										Totals With Incentive	
	O&M (1)	Other O&M (2)	Taxes (3)	Depreciation (4)	Cost of Capital (5)	Carrying Cost (6)	A&G Expense (7)	Σ Code (1) thru (7) (8)	Lost Revenue (9)	Utility Incentive (10)	Total Incentive (11)	Total Incentive Cost (12)
<b>NC DSM Program Expenses</b>												
1	439,230	-	(323)	-	(837)	-	438,070	-	-	-	438,070	
2	175,918	-	-	-	-	-	175,918	-	-	-	175,918	
3	615,148	-	(323)	-	(837)	-	613,988	-	-	-	613,988	
4	DSM Assigned A&G and CCoast					53,487	1,455,778	-	-	-	1,509,265	
5	Total DSM and Assigned A&G					53,487	1,455,778	-	-	-	2,123,253	
<b>NC EE Program Expenses</b>												
6	28,041	-	-	-	-	-	28,041	-	-	-	28,041	
7	Res New Construction					-	-	-	-	-	-	
8	CIG New Construction					-	-	-	-	-	-	
9	CIG Retrofit					-	-	-	-	-	-	
10	CFL					-	-	-	-	-	-	
11	Total EE					25,967	654,045	-	-	-	442,079	
12	EE Assigned A&G and CCoast					25,967	654,045	-	-	-	470,120	
13	Total EE and Assigned A&G					25,967	654,045	-	-	-	679,913	
<b>Test Period Total</b>												
	912,096	-	(323)	-	(837)	79,354	2,108,823	3,100,103	105,420	67,762	173,182	3,273,285

Prospective Period	Totals Before Incentive										Totals With Incentive	
	O&M (1)	Other O&M (2)	Taxes (3)	Depreciation (4)	Cost of Capital (5)	Carrying Cost (6)	A&G Expense (7)	Σ Code (1) thru (7) (8)	Lost Revenue (9)	Utility Incentive (10)	Total Incentive (11)	Total Incentive Cost (12)
<b>NC DSM Program Expenses</b>												
1	483,163	223	17,727	13,702	40,483	-	555,299	-	-	-	555,299	
2	287,928	-	-	-	-	-	287,928	-	-	-	287,928	
3	771,091	-	-	-	-	-	771,091	-	-	-	771,091	
4	DSM Assigned A&G and CCoast					484,895	508,230	-	-	-	993,126	
5	Total DSM and Assigned A&G					484,895	508,230	1,836,352	-	-	1,836,352	
<b>NC EE Program Expenses</b>												
6	42,327	-	-	-	-	-	42,327	-	-	-	42,327	
7	Res New Construction					-	-	-	-	-	-	
8	CIG New Construction					-	-	-	-	-	-	
9	CIG Retrofit					-	-	-	-	-	-	
10	CFL					-	-	-	-	-	-	
11	Total EE					82,073	228,335	310,409	-	-	175,402	
12	EE Assigned A&G and CCoast					82,073	228,335	453,134	-	-	310,409	
13	Total EE and Assigned A&G					82,073	228,335	453,134	-	-	175,402	
<b>Prospective Period Total</b>												
	913,815	223	17,727	13,702	40,483	566,969	736,566	2,289,486	106,772	68,631	175,402	2,464,888

Rate Period	Totals Before Incentive										Totals With Incentive	
	O&M (1)	Other O&M (2)	Taxes (3)	Depreciation (4)	Cost of Capital (5)	Carrying Cost (6)	A&G Expense (7)	Σ Code (1) thru (7) (8)	Lost Revenue (9)	Utility Incentive (10)	Total Incentive (11)	Total Incentive Cost (12)
<b>NC DSM Program Expenses</b>												
1	4,486,500	15,374	1,247,956	1,001,972	2,857,875	-	9,609,677	63,753	553,963	617,716	10,227,393	
2	9,048,241	-	-	-	-	-	9,048,241	11,759	4,717,668	4,729,427	13,777,668	
3	13,534,741	-	-	-	-	-	13,534,741	75,512	5,271,631	5,347,143	24,005,060	
4	DSM Assigned A&G and CCoast					1,511,130	2,623,346	4,134,476	-	-	4,134,476	
5	Total DSM and Assigned A&G					1,511,130	2,623,346	22,792,393	-	-	28,139,536	
<b>NC EE Program Expenses</b>												
6	1,292,153	-	-	-	-	-	1,292,153	167,331	230,693	398,024	1,690,177	
7	Res New Construction					-	-	-	-	-	-	
8	CIG New Construction					-	-	-	-	-	-	
9	CIG Retrofit					-	-	-	-	-	-	
10	CFL					-	-	-	-	-	-	
11	Total EE					464,566	1,178,605	1,643,171	-	-	1,643,171	
12	EE Assigned A&G and CCoast					464,566	1,178,605	7,379,164	-	-	7,379,164	
13	Total EE and Assigned A&G					464,566	1,178,605	7,379,164	755,537	590,623	1,346,160	
<b>Rate Period Total</b>												
	19,270,794	15,374	1,247,956	1,001,972	2,857,875	1,975,696	3,801,951	30,171,557	831,049	5,862,254	6,693,903	36,864,860

# Workpapers

## Section B – DSM/EE and DSM/EE EMF Rate Determination

## PROGRESS ENERGY CAROLINAS, INC.

## EE/DSM Billing Rate - December 2008 through November 2009

All rates are shown in dollars per kWh

<u>NC Rate Class</u>	<u>Total EE Rate</u> (1)	<u>Total DSM Rate</u> (2)	<u>Total EE EMF Rate</u> (3)	<u>Total DSM EMF Rate</u> (4)	<u>DSM/EE Billing Rate</u> (5)
Residential	\$0.00037	\$0.00128	\$0.00007	\$0.00018	\$0.00190
Small General Service	\$0.00037	\$0.00130	\$0.00007	\$0.00018	\$0.00192
Medium General Service	\$0.00037	\$0.00103	\$0.00007	\$0.00014	\$0.00161
Large General Service	\$0.00037	\$0.00064	\$0.00007	\$0.00009	\$0.00117
<u>Lighting</u>	<u>\$0.00037</u>	<u>\$0.00000</u>	<u>\$0.00007</u>	<u>\$0.00000</u>	<u>\$0.00044</u>
NC Retail	\$0.00037	\$0.00120	\$0.00007	\$0.00017	\$0.00181

**NOTES:**

- (1) Total EE Rate is derived in Evans Exhibit No. 6, column (7).
- (2) Total DSM Rate is derived in Evans Exhibit No. 7, column (7).
- (3) Total EE EMF Rate is derived in Evans Exhibit No. 8, column (7).
- (4) Total DSM EMF Rate is derived in Evans Exhibit No. 9, column (7).
- (5) DSM/EE Billing Rate does not include gross receipts taxes.

PROGRESS ENERGY CAROLINAS, INC.

Demand Side Management Experience Modification Factor Rate Derivation

NC Rate Class	Adjusted NC Rate Class kWhr Sales <sup>(1)</sup>	Rate Class Demand Allocation Factor <sup>(2)</sup>	DSM EMF Revenue Requirement		DSM EMF Rate (\$/kWh)		
			DSM EMF Program Costs <sup>(3)</sup>	DSM EMF Utility Incentive and Net Lost Revenue Costs <sup>(4)</sup>	DSM EMF Program Rate <sup>(5) = (3) / (1)</sup>	DSM EMF Utility Incentive and Net Lost Revenue Rate <sup>(6) = (4) / (1)</sup>	Total DSM EMF Rate <sup>(7) = (5) + (6)</sup>
Residential	15,496,949,876	70.58%	\$2,794,614	\$0	\$0.00018	\$0.00000	\$0.00018
Small General Service	1,960,336,986	9.07%	\$359,023	\$0	\$0.00018	\$0.00000	\$0.00018
Medium General Service	5,576,230,957	20.35%	\$805,969	\$0	\$0.00014	\$0.00000	\$0.00014
Large General Service <sup>(5)</sup>	0	0.00%	\$0	\$0	\$0.00009	\$0.00000	\$0.00009
Lighting	438,605,662	0.00%	\$0	\$0	\$0.00000	\$0.00000	\$0.00000
NC Retail	23,472,123,482	100%	\$3,959,605	\$0	\$0.00017	\$0.00000	\$0.00017

NOTES:

- (1) Rate Class Sales, excluding "Opt-Out" sales, are derived in Evans Exhibit No. 4, column (3).
- (2) Rate Class Demand Allocation Factor is derived in Evans Exhibit No. 5.
- (3) The Total EE and Assigned A&G Revenue Requirement is derived in Evans Exhibit No. 1, column (8) for the historic test year August 21, 2007 to March 31, 2008 and the forecast period April 2008 through July 2008. The forecast period will be updated to reflect actual costs prior to the September hearing.
- (4) The Total EE and Assigned A&G Revenue Requirement is derived in Evans Exhibit No. 1, column (11) for the historic test year August 21, 2007 to March 31, 2008 and the forecast period April 2008 through July 2008. The forecast period will be updated to reflect actual costs prior to the September hearing.
- (5) A rate is shown for the LGS Class, even though all customers are assumed to opt-out, based upon the class load requirement.

**PROGRESS ENERGY CAROLINAS, INC.**  
**Energy Efficiency Experience Modification Factor Rate Derivation**

NC Rate Class	Adjusted NC Rate Class kWhr Sales <sup>(1)</sup>	Rate Class Energy Allocation Factor <sup>(2)</sup>	EE EMF Revenue Requirement		EE EMF Rate (\$/kWh)		
			EE EMF Program Costs <sup>(3)</sup>	EE EMF Utility Incentive and Net Lost Revenue Costs <sup>(4)</sup>	EE EMF Program Rate <sup>(5) = (3) / (1)</sup>	EE EMF Utility Incentive and Net Lost Revenue Rate <sup>(6) = (4) / (1)</sup>	Total EE EMF Rate <sup>(7) = (5) + (6)</sup>
Residential	15,496,949,876	66.02%	\$944,115	\$230,145	\$0.00006	\$0.00001	\$0.00007
Small General Service	1,960,336,986	8.35%	\$119,429	\$29,113	\$0.00006	\$0.00001	\$0.00007
Medium General Service	5,576,230,957	23.76%	\$339,719	\$82,813	\$0.00006	\$0.00001	\$0.00007
Large General Service <sup>(5)</sup>	0	0.00%	\$0.00	\$0.00	\$0.00006	\$0.00001	\$0.00007
Lighting	438,605,662	1.87%	\$26,721	\$6,514	\$0.00006	\$0.00001	\$0.00007
NC Retail	23,472,123,482	100.00%	\$1,429,984	\$348,585	\$0.00006	\$0.00001	\$0.00007

**NOTES:**

- (1) Rate Class Sales, excluding "Opt-Out" sales, are derived in Evans Exhibit No. 4, column (3).
- (2) Rate Class Energy Allocation Factor is derived in Evans Exhibit No. 4.
- (3) The Total EE and Assigned A&G Revenue Requirement is derived in Evans Exhibit No. 1, column (8) for the historic test year August 21, 2007 to March 31, 2008 and the forecast period April 2008 through July 2008. The forecast period will be updated to reflect actual costs prior to the September hearing.
- (4) The Total EE and Assigned A&G Revenue Requirement is derived in Evans Exhibit No. 1, column (11) for the historic test year August 21, 2007 to March 31, 2008 and the forecast period April 2008 through July 2008. The forecast period will be updated to reflect actual costs prior to the September hearing.
- (5) A rate is shown for the LGS Class, even though all customers are assumed to opt-out, based upon the class load requirement.

**PROGRESS ENERGY CAROLINAS, INC.**  
**Demand Side Management Rate Derivation**

NC Rate Class	Adjusted NC Rate Class kWhr Sales <sup>(1)</sup>	Rate Class Demand Allocation Factor <sup>(2)</sup>	DSM Revenue Requirement		DSM Rate (\$/kWh)		
			DSM Program Costs <sup>(3)</sup>	DSM Utility Incentive and Net Lost Revenue Costs <sup>(4)</sup>	DSM Program Rate <sup>(5) = (3) / (1)</sup>	DSM Utility Incentive and Net Lost Revenue Rate <sup>(6) = (4) / (1)</sup>	Total DSM Rate <sup>(7) = (5) + (6)</sup>
Residential	15,496,949,876	70.58%	\$16,086,436	\$3,773,911	\$0.00104	\$0.00024	\$0.00128
Small General Service	1,960,336,986	9.07%	\$2,066,618	\$484,833	\$0.00105	\$0.00025	\$0.00130
Medium General Service	5,576,230,957	20.35%	\$4,639,340	\$1,088,399	\$0.00083	\$0.00020	\$0.00103
Large General Service <sup>(5)</sup>	0	0.00%	\$0	\$0	\$0.00052	\$0.00012	\$0.00064
Lighting	438,605,662	0.00%	\$0	\$0	\$0.00000	\$0.00000	\$0.00000
NC Retail	23,472,123,482	100.00%	\$22,792,393	\$5,347,143	\$0.00097	\$0.00023	\$0.00120

**NOTES:**

- (1) Rate Class Sales, excluding "Opt-Out" sales, are derived in Evans Exhibit No. 4, column (3).
- (2) Rate Class Demand Allocation Factor is derived in Evans Exhibit No. 5.
- (3) The Total EE and Assigned A&G Revenue Requirement is derived in Evans Exhibit No. 1, column (8).
- (4) The Total EE and Assigned A&G Revenue Requirement is derived in Evans Exhibit No. 1, column (11).
- (5) A rate is shown for the LGS Class, even though all customers are assumed to opt-out, based upon the class load requirement.

PROGRESS ENERGY CAROLINAS, INC.

Energy Efficiency Rate Derivation

NC Rate Class	Adjusted NC Rate Class kWhr Sales <sup>(1)</sup>	Rate Class Energy Allocation Factor <sup>(2)</sup>	EE Revenue Requirement		EE Rate (\$/kWh)		
			EE Program Costs <sup>(3)</sup>	EE Utility Incentive and Net Lost Revenue Costs <sup>(4)</sup>	EE Program Rate <sup>(5) = (3) / (1)</sup>	EE Utility Incentive and Net Lost Revenue Rate <sup>(6) = (4) / (1)</sup>	Total EE Rate <sup>(7) = (5) + (6)</sup>
Residential	15,496,949,876	66.02%	\$4,871,930	\$888,772	\$0.00031	\$0.00006	\$0.00037
Small General Service	1,960,336,986	8.35%	\$616,291	\$112,428	\$0.00031	\$0.00006	\$0.00037
Medium General Service	5,576,230,957	23.76%	\$1,753,055	\$319,805	\$0.00031	\$0.00006	\$0.00037
Large General Service <sup>(5)</sup>	0	0.00%	\$0	\$0	\$0.00031	\$0.00006	\$0.00037
Lighting	438,605,662	1.87%	\$137,889	\$25,155	\$0.00031	\$0.00006	\$0.00037
NC Retail	23,472,123,482	100%	\$7,379,164	\$1,346,160	\$0.00031	\$0.00006	\$0.00037

NOTES:

- (1) Rate Class Sales, excluding "Opt-Out" sales, are derived in Evans Exhibit No. 4, column (3).
- (2) Rate Class Energy Allocation Factor is derived in Evans Exhibit No. 4
- (3) The Total EE and Assigned A&G Revenue Requirement is derived in Evans Exhibit No. 1, column (8).
- (4) The Total EE and Assigned A&G Revenue Requirement is derived in Evans Exhibit No. 1, column (11).
- (5) A rate is shown for the LGS Class, even though all customers are assumed to opt-out, based upon the class load requirement.

**PROGRESS ENERGY CAROLINAS, INC.**  
**Demand Allocation Factors - Applicable to DSM Programs**

**North Carolina Rate Class Demand Allocation Factors**

Rate Class	Total NC Rate Class Sales <sup>(1)</sup> (1)	Sales Subject to Opt-Out <sup>(2)</sup> (2)	Rate Class Demand <sup>(3)</sup> (3)	Revised Rate Class Demand (4) = ((1 - 2) / 1) * 3	Rate Class Allocation Factor (5) = (4)/Total of Column 4
Residential	15,496,950	0	4,019,614	4,019,614	70.57809%
Small General Service	1,985,374	25,037	522,994	516,398	9.06714%
Medium General Service	11,734,023	6,157,792	2,439,422	1,159,260	20.35477%
Large General Service	9,076,284	9,076,284 <sup>(4)</sup>	1,168,621	0	0.00000%
<u>Lighting</u>	<u>453,441</u>	<u>14,836</u>	<u>0</u>	<u>0</u>	<u>0.00000%</u>
NC Retail	38,746,072	15,273,949	8,150,651	5,695,273	100.00000%

**NOTES:**

- (1) Total NC Rate Class Sales (MWHrs) are for the forecasted year ended November 2009.
- (2) Opt-Out sales for the year ended March 31, 2008 are provided in Evans Exhibit No. 3
- (3) The CP demands are from the annual NC Cost of Service Study for August 9, 2007 during the hour ended at 4 p.m.
- (4) LGS Opt-Out sales were set to match the forecast sales since all customers in the LGS class are eligible to opt-out.



## PROGRESS ENERGY CAROLINAS, INC.

## Energy Allocation Factors - Applicable to EE Program Costs

## North Carolina Rate Class Energy Allocation Factors

<u>Rate Class</u>	<u>Total NC Rate Class Sales (MWhrs) <sup>(1)</sup></u> (1)	<u>Opt-Out Sales <sup>(2)</sup></u> (2)	<u>Adjusted NC Rate Class MWhr Sales</u> (3) = (1) - (2)	<u>Rate Class Energy Allocation Factor</u> (4) = (3) / NC Total in Column 3
Residential	15,496,950	0	15,496,950	66.02%
Small General Service	1,985,374	25,037	1,960,337	8.35%
Medium General Service	11,734,023	6,157,792	5,576,231	23.76%
Large General Service	9,076,284	9,076,284 <sup>(3)</sup>	0	0.00%
<u>Lighting</u>	<u>453,441</u>	<u>14,836</u>	<u>438,606</u>	<u>1.87%</u>
NC Retail	38,746,072	15,273,949	23,472,123	100.00%

**NOTES:**

(1) Total NC Rate Class Sales (MWhrs) are for the forecasted year ended November 2009.

(2) Opt-Out sales for the year ended March 31, 2008 are provided in Evans Exhibit No. 3

(3) LGS Opt-Out sales were set to match the forecast sales since all customers in the LGS class are eligible to opt-out.

**PROGRESS ENERGY CAROLINAS, INC.**  
**Annual Sales for NC Customers Eligible for DSM/EE Opt-Out**  
**Annual Sales for the Year Ended March 31, 2008**

Rate Class	Commercial	Industrial*	Total
RES	0	0	0
SGS	8,027,300	17,009,689	25,036,989
MGS	3,823,495,393	2,334,296,625	6,157,792,018
LGS	1,133,541,491	8,007,538,528	9,141,080,019
Lighting	0	14,835,590	14,835,590
Total Opt-Out Sales	4,965,064,184	10,373,680,432	15,338,744,616

\* Industrial category also includes Revenue Class 45, Public Authority

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# Workpapers

## Section C – Determination of DSDR Related Revenue Requirement

**PROGRESS ENERGY CAROLINAS, INC.**

**DSDR DSM Measure  
Revenue Requirement Analysis**

	TEST PERIOD					PROPOSED RATE PERIOD					RATE PERIOD		
	Sep-07 Month 1	Oct-07 Month 2	Nov-07 Month 3	Dec-07 Month 4	Jan-08 Month 5	Feb-08 Month 6	Mar-08 Month 7	Apr-08 Month 8	May-08 Month 9	Jun-08 Month 10	Jul-08 Month 11	Dec-08 Month 16	Jan-09 Month 17
<b>RATE BASE</b>													
1 Gross Plant in Service	-	-	-	-	-	-	-	-	-	-	6,170,930	14,810,232	18,665,155
2 Accum. Depreciation	-	-	-	-	-	-	-	-	-	-	(15,759)	(151,452)	(209,680)
3 Net Plant in Service	-	-	-	-	(18,831)	(37,703)	(56,617)	(75,561)	(154,894)	(234,491)	6,155,131	14,649,080	18,355,475
4 Accum. Deferred Income Taxes	-	-	-	-	(18,831)	(37,703)	(56,617)	(75,561)	(154,894)	(234,491)	6,155,131	14,649,080	18,355,475
5 Rate Base	-	-	-	-	-	-	-	-	-	-	6,155,131	14,649,080	18,355,475

**COST OF SERVICE (REVENUE REQUIREMENT)**

6 Debt at 6.62% Wgt'd at 48.57%	(66)	(132)	(198)	(264)	(340)	(416)	(492)	(568)	(644)	(720)	(796)	(872)	(948)
7 Preferred at 8.75% Wgt'd at 7.43%	(10)	(20)	(30)	(40)	(50)	(60)	(70)	(80)	(90)	(100)	(110)	(120)	(130)
8 Equity at 12.75% Wgt'd at 44.0%	(88)	(176)	(264)	(352)	(440)	(528)	(616)	(704)	(792)	(880)	(968)	(1,056)	(1,144)
9 Gross up for Income Taxes: (= 39.1851%)	(63)	(127)	(190)	(254)	(317)	(380)	(443)	(506)	(569)	(632)	(695)	(758)	(821)
10 Total Return	(227)	(455)	(683)	(912)	(1,140)	(1,368)	(1,596)	(1,824)	(2,052)	(2,280)	(2,508)	(2,736)	(2,964)
11 Property Tax @ 0.47% & Insurance @ 0.05%	-	-	-	-	-	-	-	-	-	-	2,574	6,418	8,044
12 O&M Expense	-	-	4,396	125,715	83,089	29,273	274,425	(213,220)	297,476	208,233	280,291	351,393	438,329
13 Book Depreciation	-	-	-	-	-	-	-	-	-	-	15,799	37,918	48,528
14 Income Tax on Permanent Difference	-	-	-	-	-	-	-	-	-	-	-	-	-
15 Total Revenue Requirement	-	-	4,396	125,715	82,862	28,818	273,742	(214,132)	295,607	205,403	348,076	561,087	700,160

**Book Depreciation**

16 Gross Plant in Service	-	-	-	-	-	-	-	-	-	-	5,423,189	13,015,654	15,861,927
17 Book Depreciation Rate	0.2292%	0.2292%	0.2292%	0.2292%	0.2292%	0.2292%	0.2292%	0.2292%	0.2292%	0.2292%	0.2292%	0.2292%	0.2292%
18 Book Depreciation Expense	-	-	-	-	-	-	-	-	-	-	12,428	29,828	36,350

**Communications Equipment**

19 Gross Plant in Service	-	-	-	-	-	-	-	-	-	-	747,741	1,794,578	2,701,228
20 Book Depreciation Rate	0.4508%	0.4508%	0.4508%	0.4508%	0.4508%	0.4508%	0.4508%	0.4508%	0.4508%	0.4508%	0.4508%	0.4508%	0.4508%
21 Book Depreciation Expense	-	-	-	-	-	-	-	-	-	-	3,371	8,091	12,178

**Software**

22 Gross Plant in Service	-	-	-	-	-	-	-	-	-	-	-	-	-
23 Book Depreciation Rate	1.6667%	1.6667%	1.6667%	1.6667%	1.6667%	1.6667%	1.6667%	1.6667%	1.6667%	1.6667%	1.6667%	1.6667%	1.6667%
24 Book Depreciation Expense	-	-	-	-	-	-	-	-	-	-	-	-	-

**DEFERRED INCOME TAXES:**

31 Software Expense	-	-	-	-	-	-	-	-	-	-	-	-	-
32 Tax Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-
33 (CFI Income)	-	-	-	-	-	-	-	-	-	-	-	-	-
34 Book Depreciation on Cash Basis (excludes AFUDC)	-	-	-	-	-	-	-	-	-	-	-	-	-
35 (AFUDC Debt Income)	-	-	-	-	-	-	-	-	-	-	-	-	-
36 AFUDC Debt Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-
37 Tax Expense/(Income) minus Book Expense/(Income)	-	-	-	-	-	-	-	-	-	-	-	-	-
38 Combined Fed & State Tax Rate	39.19%	39.19%	39.19%	39.19%	39.19%	39.19%	39.19%	39.19%	39.19%	39.19%	39.19%	39.19%	39.19%
39 Deferred Income Taxes	-	-	-	-	-	-	-	-	-	-	-	-	-
40 Accumulated Deferred Income Taxes	-	-	-	-	-	-	-	-	-	-	-	-	-

**Notes**

- 1 - Since no assets that accrue AFUDC will go in service before the end of the rate period, a calculation of AFUDC Debt depreciation or income Tax on the Perm Diff are not needed for this filing.
- 2 - Since no assets that accrue AFUDC will go in service before the end of the rate period, for the purposes of this filing, plant book base equals cash base.



# Progress Energy Carolinas, Inc.

## Calculation Tax and Return Related Input Factors

	<u>Component</u>	<u>Percent</u>	<u>Rate</u>	<u>Wgt'd Rate</u>	<u>After Tax Wgt'd Cost</u>	<u>Pre Tax Wgt'd Cost</u>	
1	Debt	48.6%	8.62%	4.1867%	2.5462% (a)	4.1867%	
2	Preferred	7.4%	8.75%	0.6501%	0.6501%	1.0690% (b)	
3	Common	44.0%	12.75%	5.6100%	5.6100%	9.2247% (c)	
4	Total	100.0%		10.4469%	8.8063%	14.4805%	
5							
6	<b>After Tax Cost of Debt</b>						
7	Wgt'd Debt Component				4.1867%		
8	PEC Composite Income Tax Rate				39.1851% (d)		
9	Federal Income Tax Amount				1.6406%		
10							
11	After Tax Debt Cost Component				2.5462% (a)		
12							
13	<b>Incremental Tax Rate</b>						
14	Pretax Debt Component				4.1867%		
15	After-Tax Debt Component				2.5462%		
16	After Tax Percent of Pretax Amt				60.8149%		
17	Effective Incremental Tax Rate						
18	(1 - After Tax Percent of Pretax )				39.1851% (d)		
19							
20	<b>Pre Tax Cost of Equity</b>						
21	Wgt'd Common Equity Component					5.6100%	
22	Wgt'd Preferred Component				0.6501%		
23	Total Equity					5.6100%	
24	After Tax Percent of Pretax Amt				60.8149%	60.8149%	
25	Pre Tax Cost of Equity						
26	(Pre Tax Cost of Equity / After Tax Percent of Pretax Amt )				1.0690% (b)	9.2247% (c)	
27							
28							
29	<b>Composite Income Tax Rate</b>						
30							
31	<u>Jurisdiction</u>			<u>Rate</u>			
32	Federal			32.7465%			
33	North Carolina			5.7824%			
34	South Carolina			0.6562%			
35	PEC Composite Income Tax Rate				39.1851% (d)		

Progress Energy Carolinas, Inc.

Docket No. E-2, Sub 931

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**FILED**

**JUN 06 2008**

Clerk's Office  
N.C. Utilities Commission

## **Demand Side Management and Energy Efficiency Programs**

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# **Filing Requirements**

## **Pursuant to Rule R8-69**

**June 6, 2008**

Recovery request for actual DSM/EE costs incurred from August 21, 2007 through March 31, 2008 and for forecasted costs covering both the period April 1, 2008 through July 31, 2008 and the period December 1, 2008 through November 30, 2009. This request will result in the establishment of DSM/EE and DSM/EE EMF riders pursuant to NCUC Rule R8-69 and G.S. 62-133.9

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**Rule R8-69(d)(2) – List of customers opting out of participation**

**Rule R8-69. Cost recovery for demand-side management and energy efficiency measures of electric public utilities.**

**(d) Special Provisions for Industrial or Large Commercial Customers.**

(2) At the time the electric public utility petitions for the annual rider, it shall provide the Commission with a list of those industrial or large commercial customers that have opted out of participation in the new demand-side management or energy efficiency measures.

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As of June 2, 2008 the following PEC industrial and large commercial customers have opted out of participation in new demand-side management or energy efficiency measures, pursuant to G.S. 62-133.9(f) and Commission Rule R8-69(d)(1):

1. AJINOMOTO USA INC
2. FRONTIER SPINNING MILLS
3. MOEN INC
4. PILKINGTON
5. POLYMER GROUP INC
6. SAINT GOBAIN CONTAINERS
7. INVISTA SARL
8. PRAXAIR, INC

**Rule R8-69(f)(1)(i) - Projected NC retail sales for the rate period**

**Rule R8-69 (f) Filing Requirements and Procedure.**

- (1) Each electric public utility shall submit to the Commission all of the following information and data in its application:
- (i) Projected North Carolina retail monthly kWh sales for the rate period.

The Company's projected North Carolina retail monthly kWh sales for the rate period, December 1, 2008 through November 30, 2009, are provided in the following table:

**Projected North Carolina Retail Monthly kWh Sales**

Month	Estimated kWh
Dec-08	3,165,225,000
Jan-09	3,394,236,000
Feb-09	3,224,456,000
Mar-09	3,040,441,000
Apr-09	2,925,919,000
May-09	2,880,848,000
Jun-09	3,283,240,000
Jul-09	3,698,326,000
Aug-09	3,849,462,000
Sep-09	3,519,867,000
Oct-09	2,999,051,000
Nov-09	2,765,001,000
<b>Total</b>	<b>38,746,072,000</b>

**Rule R8-69(f)(1)(ii)a - Total expenses expected to be incurred during the rate period**

**Rule R8-69 (f) Filing Requirements and Procedure.**

- (1) Each electric public utility shall submit to the Commission all of the following information and data in its application:
  - (ii) For each measure for which cost recovery is requested through the DSM/EE rider:
    - a. total expenses expected to be incurred during the rate period in the aggregate and broken down by type of expenditure, per appropriate capacity, energy and measure unit metric and the proposed jurisdictional allocation factors

For purposes of cost recovery through the DSM/EE rider, the Company's expected expenses for the rate period, December 1, 2008 through November 30, 2009, have been broken down by type of expenditure and provided in the following table:

Program/Measure	Recoverable Expenditures					Total Costs and Incentives
	O&M	Depreciation	Cost of Capital	Utility Incentives	Other	
<b>Demand-Side Management Programs</b>						
DSDR Implementation	\$ 5,190,734	\$ 1,155,290	\$ 3,295,177	\$ 1,438,914	\$ 712,033	\$ 11,792,148
EnergyWise	10,432,771	-	-	-	5,453,160	15,885,930
<b>Energy Efficiency Programs</b>						
Res New Construction	1,523,652	-	-	-	470,203	1,993,856
CIG New Construction	1,046,424	-	-	-	134,109	1,180,532
CIG Retrofit	4,193,567	-	-	-	370,801	4,564,368
CFL Program	-	-	-	-	621,753	621,753
<b>Other DSM/EE Activities</b>						
A&G	4,414,048	-	-	-	-	4,414,048
<b>Program Subtotals</b>	<b>\$ 26,801,195</b>	<b>\$ 1,155,290</b>	<b>\$ 3,295,177</b>	<b>\$ 1,438,914</b>	<b>\$ 712,033</b>	<b>\$ 40,452,635</b>
Return on Balances <sup>1</sup>						2,287,301
<b>Expenditure Totals</b>						<b>\$ 42,739,936</b>

The total expenditures, excluding utility incentives and A&G, for PEC's various DSM/EE measures have been unitized on the basis of appropriate capacity or energy metric and are provided on the following table:

Program/Measure	Total Costs	DSM Costs per MW	EE Cost per MWH
<b>Demand-Side Management Programs</b>			
DSDR Implementation	\$ 11,080,115	\$ 380,760	NA
EnergyWise	10,432,771	197,590	NA
<b>Energy Efficiency Programs</b>			
Res New Construction	\$ 1,523,652	NA	\$ 420
CIG New Construction	1,046,424	NA	607
CIG Retrofit	4,193,567	NA	755
CFL Program	-	NA	NA

<sup>1</sup> The Return on Balances amount, on a system basis, reflects the sum of the North Carolina specific return calculated on the North Carolina deferral balance and the South Carolina specific return on the South Carolina deferral balance.

PEC Exhibit No. 1  
Filing Requirements

For purposes of cost recovery through the North Carolina DSM/EE rider, the Company's expected expenses for the rate period, December 1, 2008 through November 30, 2009, have been broken down for North Carolina jurisdictional retail customers by type of expenditure and provided in the following table:

Program/Measure	Recoverable Expenditures (to be recovered)					
	O&M	Depreciation	Loss of Capital	Property and General Taxes	Utility Incentives	Total Costs and Incentives
<b>Demand-Side Management Programs</b>						
DSDR Implementation	\$ 4,501,874	\$1,001,972	\$2,857,875	\$1,247,956	\$ 617,716	\$10,227,393
EnergyWise	9,048,241	-	-	-	4,729,427	13,777,668
<b>Energy Efficiency Programs</b>						
Res New Construction	1,292,153	-	-	-	398,024	1,690,177
CIG New Construction	887,433	-	-	-	112,328	999,761
CIG Retrofit	3,556,408	-	-	-	309,934	3,866,342
CFL Program	-	-	-	-	525,874	525,874
<b>Other DSM/EE Activities</b>						
A&G	3,801,951	-	-	-	-	3,801,951
<b>Program Subtotals</b>	<b>\$23,088,059</b>	<b>\$1,001,972</b>	<b>\$2,857,875</b>	<b>\$1,247,956</b>	<b>\$6,698,303</b>	<b>\$34,893,165</b>
Return on Balances						1,975,696
<b>Expenditure Totals</b>						<b>\$36,864,860</b>

The Company's proposed jurisdictional allocation factors for the rate period, December 1, 2008 through November 30, 2009, are provided in the following table. It is important to note that these jurisdictional allocation factors apply to costs that have not been directly assigned.

Measure/Program Category	North Carolina
<b>Demand Side Management (DSM)</b>	
DSDR Implementation	86.7%
EnergyWise	86.7%
<b>Energy Efficiency Programs</b>	
CIG New Construction	84.8%
CIG Retrofit	84.8%
Residential New Construction	84.8%
<b>Other DSM/EE Activities</b>	
DSM / EE A&G	86.1%

**Rule R8-69(f)(1)(ii)b - Expected cost savings directly attributable to measures**

**Rule R8-69 (f) Filing Requirements and Procedure.**

- (1) Each electric public utility shall submit to the Commission all of the following information and data in its application:
  - (ii) For each measure for which cost recovery is requested through the DSM/EE rider:
    - b. total costs that the utility does not expect to incur during the rate period as a direct result of the measure in the aggregate and broken down by type of cost, per appropriate capacity, energy and measure unit metric, and the proposed jurisdictional allocation factors as well as any changes in the estimated future amounts since last filed with the Commission;

For measures in which cost recovery has been requested through the DSM/EE rider, the Company has provided its total expected cost savings for the rate period, December 1, 2008 through November 30, 2009 that are directly applicable to the measures. These can be classified as short run variable costs. In addition to the cost savings, associated unit metrics have been provided on the following table.

Program / Measure	Fuel (\$000s)	MWH	Savings Per MWH
DSDR Implementation	\$ 989	22,211	\$ 44.52
EnergyWise – Res Load Control	78	236	330.50
CIG New Construction	70	1,724	40.60
CIG Retrofit	229	5,558	41.20
Res New Construction	154	3,626	42.47
CFL Program	270	6,934	36.63
<b>Totals</b>	<b>\$ 1,790</b>	<b>40,289</b>	<b>\$ 44.43</b>

While notional with respect to expenditure periods, the Company's avoided costs were provided to the Commission as a part of its program requests in Commission Docket Nos. E-2, Sub 926, Sub 927, and Sub 928.

The Company's proposed jurisdictional allocation factors for the rate period, December 1, 2008 through November 30, 2009, are provided in the following table:

Measure/Program Category	North Carolina
<b>Demand Side Management (DSM)</b>	
DSDR Implementation	86.7%
EnergyWise	86.7%
<b>Energy Efficiency Programs</b>	
CIG New Construction	84.8%
CIG Retrofit	84.8%
Residential New Construction	84.8%

**Rule R8-69(f)(1)(ii)c - Measurement and verification activities for rate period**

**Rule R8-69 (f) Filing Requirements and Procedure.**

- (1) Each electric public utility shall submit to the Commission all of the following information and data in its application:
    - (ii) For each measure for which cost recovery is requested through the DSM/EE rider:
      - c. a description of the measurement and verification activities to be conducted during the rate period, including their estimated costs;
- 

Anticipated measurement and verification (M&V) activities for the Company's programs were provided as a part of its program requests in Commission Docket Nos. E-2, Sub 926, Sub 927, and Sub 928. In addition, the Company is in the process of obtaining a third-party consultant to provide for ongoing M&V support.

**Rule R8-69(f)(1)(ii)d - Expected summer and winter peak demand reductions**

**Rule R8-69 (f) Filing Requirements and Procedure.**

- (1) Each electric public utility shall submit to the Commission all of the following information and data in its application:
  - (ii) For each measure for which cost recovery is requested through the DSM/EE rider:
    - d. total expected summer and winter peak demand reduction per appropriate capacity, energy, and measure unit metric and in the aggregate;

The following tables provide estimated summer and winter peak demand reductions, at the generator, for the measures in which the Company is seeking cost recovery. The reductions are provided by measure and in aggregate.

Expected Summer Peak Demand Reduction (MW)

	CFL Program	DSDR Implementation	EnergyWise	CIG New Construction	CIG Retrofit	Res New Construction	Total
2008	0.7	6.7	12.8	0.1	0.1	0.2	20.6
2009	0.7	29.1	52.8	0.4	1.3	1.1	85.4
2010	0.7	101.5	92.7	0.9	2.9	2.4	201.1
2011	0.7	174.2	132.7	1.7	5.3	5.1	319.7
2012	0.7	247.0	172.7	2.7	8.2	9.1	440.4

Expected Winter Peak Demand Reduction (MW)<sup>2</sup>

	CFL Program	DSDR Implementation	EnergyWise	CIG New Construction	CIG Retrofit	Res New Construction	Total
2008	0.7	-	2.8	-	-	-	3.3
2009	0.7	-	9.5	-	-	-	10.0
2010	0.7	-	16.2	-	-	-	16.7
2011	0.7	-	22.9	-	-	-	23.4
2012	0.7	-	29.6	-	-	-	30.1

<sup>2</sup> With the exception of PEC's EnergyWise program, PEC's DSM/EE measures are focused on its summer peak. The winter peak reductions associated with PEC's measures, including those from the EnergyWise program, will be determined through the measurement and verification (M&V) process. The Company's CFL program provides year-round benefits.

## Rule R8-69(f)(1)(ii)e - Expected energy reductions

### Rule R8-69 (f) Filing Requirements and Procedure.

- (1) Each electric public utility shall submit to the Commission all of the following information and data in its application:
  - (ii) For each measure for which cost recovery is requested through the DSM/EE rider:
    - e. total expected energy reduction in the aggregate and per appropriate capacity, energy and measure unit metric

The following table provides estimated energy reductions, at the generator, for the measures in which the Company is seeking cost recovery. The reductions are provided both by measure and in aggregate.

	CFL Program	DSM Implementation	EnergyWise <sup>3</sup>	CIG New Construction	CIG Retrofit	Res New Construction	Total
2008	6,934	9,195	59	345	505	774	17,812
2009	6,934	22,211	236	1,724	5,558	3,626	40,289
2010	6,934	38,956	413	3,966	12,885	8,189	71,343
2011	6,934	57,389	590	7,415	23,244	17,316	112,888
2012	6,934	76,443	766	11,726	35,877	31,006	162,752

<sup>3</sup> Energy reductions associated with EnergyWise are proportional to the number of load control events. For the purposes of this response, it has been assumed that there were five summer load control events and four winter load control events. The Company's tariff provides for up to sixty-hours of winter and sixty-hours of summer load control on connected devices.



### Rule R8-69(f)(1)(iii)a - Actual test period costs

**Rule R8-69 (f) Filing Requirements and Procedure.**

- (1) Each electric public utility shall submit to the Commission all of the following information and data in its application:
  - (iii) For each measure for which cost recovery is requested through the DSM/EE EMF rider:
    - a. total expenses for the test period in the aggregate and broken down by type of expenditure per appropriate capacity, energy and measure unit metric and the proposed jurisdictional allocation factors

For purposes of cost recovery through the DSM/EE rider, the Company's actual expenditures for the test period, August 21, 2007 through March 31, 2008, have been broken down by type of expenditure and are provided in the following table:

Program/Measure	Recoverable Expenditures					Total Costs and Incentives
	O&M	Depreciation	Cost of Capital	and Federal Taxes	Utility Incentives	
<b>Demand-Side Management Programs</b>						
DSDR Implementation	\$ 516,899	-	\$ (985)	\$ (380)	-	\$ 515,534
EnergyWise	195,831	-	-	-	-	195,831
<b>Energy Efficiency Programs</b>						
Res New Construction	33,489	-	-	-	-	33,489
CIG New Construction		-	-	-	-	-
CIG Retrofit	-	-	-	-	-	-
CFL	284,399	-	-	-	207,421	491,820
<b>Other DSM/EE Activities</b>						
A&G	2,396,536	-	-	-	-	2,396,536
<b>Program Subtotals</b>	<b>53,427,154</b>		<b>\$ (985)</b>	<b>\$ (380)</b>	<b>\$ 207,421</b>	<b>\$ 3,633,209</b>
Return on Balances <sup>4</sup>						86,340
<b>Expenditure Totals</b>						<b>\$ 3,719,550</b>

For purposes of cost recovery through the North Carolina DSM/EE rider, the Company's expected expenses for the test period, August 21, 2007 through March 31, 2008, have been broken down for North Carolina jurisdictional retail customers by type of expenditure and are provided in the following table:

<sup>4</sup> The Return on Balances amount, on a system basis, reflects the sum of the North Carolina specific return calculated on the North Carolina deferral balance and the South Carolina specific return on the South Carolina deferral balance.

Program/Measure	Recoverable expenditures (Total Expenditure)(y)				Utility Incentives	Total Costs and Incentives
	DSM	Depreciation	Cost of Capital	Other		
<b>Demand-Side Management Programs</b>						
DSDR Implementation	\$ 439,230	-	\$ (837)	\$ (323)	-	\$ 438,070
EnergyWise	175,918	-	-	-	-	175,918
<b>Energy Efficiency Programs</b>						
Res New Construction	28,041	-	-	-	-	28,041
CIG New Construction	-	-	-	-	-	-
CIG Retrofit	-	-	-	-	-	-
CFL	268,897	-	-	-	173,182	442,079
<b>Other DSM/EE Activities</b>						
A&G	2,109,823	-	-	-	-	2,109,823
<b>Program Subtotals:</b>	<b>\$3,021,909</b>	<b>-</b>	<b>\$ (837)</b>	<b>\$ (323)</b>	<b>\$173,182</b>	<b>\$3,193,931</b>
Return on Balances						79,354
<b>Expenditure Totals</b>						<b>\$3,273,285</b>

For programs under development, comparative metrics are not applicable for the test period. As illustrated in the values below, the CFL test period cost for each annualized MWH saved is approximately \$38.79. This translates into approximately \$3.88 per MWH over the ten-year study period.

Program / Measure	Total Costs	DSM Costs below MW	EE Cost per MWH
<b>Demand-Side Management Programs</b>			
DSDR Implementation	\$ 438,070	NA	NA
EnergyWise	175,918	NA	NA
<b>Energy Efficiency Programs</b>			
Res New Construction	\$ 28,041	NA	NA
CIG New Construction	-	NA	NA
CIG Retrofit	-	NA	NA
CFL Program	268,897	NA	\$ 38.79

Whenever possible, costs are directly assigned. However, when this is not practical, jurisdictional allocation factors are employed. The Company's proposed jurisdictional allocation factors for the test period, August 21, 2007 through March 31, 2008, are provided in the following table:

Measure/Program Category	North Carolina
<b>Demand Side Management (DSM)</b>	
DSDR Implementation	85.0%
EnergyWise	85.0%
<b>Energy Efficiency Programs</b>	
CIG New Construction	83.7%
CIG Retrofit	83.7%
Residential New Construction	83.7%
CFL Program	83.7%
<b>Other DSM/EE Activities</b>	
DSM / EE A&G	84.6%

**Rule R8-69(b)(2)– Experienced over or under-recovery of cost prior to hearing**

**Rule R8-69 (b) Recovery of Costs** Upon the request of the electric public utility, the Commission shall also incorporate the experienced over-recovery or under-recovery of costs up to thirty (30) days prior to the date of the hearing in its determination of the DSM/EE EMF rider, provided that the reasonableness and prudence of these costs shall be subject to review in the utility's next annual DSM/EE rider hearing.

The Company anticipates that it will have actual results available from the end of its test period through July 31, 2008 within the timeline provided for by Commission Rule R-69(b)(2). The Company has incorporated its estimated costs for the period April 1, 2008 through July 31, 2008 in the following table. Actual results will be provided to the Commission at least 30 days prior to the date of its hearing in this matter. At that time, the actual amounts will be used in place of the following estimates.

Program / Measure	Recoverable Expenditures					Total Costs and Incentives
	O&M	Depreciation	Cost of Capital	Income and General Taxes	Utility Incentives	
<b>Demand-Side Management Programs</b>						
DSDR Implementation	\$ 553,037	\$15,799	\$46,678	\$20,440	-	\$ 635,954
EnergyWise	333,977	-	-	-	-	333,977
<b>Energy Efficiency Programs</b>						
Res New Construction	50,167	-	-	-	-	50,167
CIG New Construction	-	-	-	-	-	-
CIG Retrofit	110,117	-	-	-	-	110,117
CFL	9,785	-	-	-	207,421	217,206
<b>Other DSM/EE Activities</b>						
A&G	856,404	-	-	-	-	856,404
<b>Program Subtotals</b>	<b>\$1,913,487</b>	<b>\$15,799</b>	<b>\$46,678</b>	<b>\$20,440</b>	<b>\$207,421</b>	<b>\$2,203,825</b>
Return on Balances <sup>5</sup>						612,648
<b>Expenditure Totals</b>						<b>\$2,816,472</b>

Program / Measure	Recoverable Expenditures (North Carolina)					Total Costs and Incentives
	O&M	Depreciation	Cost of Capital	Income and General Taxes	Utility Incentives	
<b>Demand-Side Management Programs</b>						
DSDR Implementation	\$ 483,386	\$13,702	\$40,483	\$17,727	-	\$ 555,299
EnergyWise	287,928	-	-	-	-	287,928
<b>Energy Efficiency Programs</b>						
Res New Construction	42,327	-	-	-	-	42,327
CIG New Construction	-	-	-	-	-	-
CIG Retrofit	92,204	-	-	-	-	92,204
CFL	8,193	-	-	-	175,402	183,596
<b>Other DSM/EE Activities</b>						
A&G	736,566	-	-	-	-	736,566
<b>Program Subtotals</b>	<b>\$1,650,604</b>	<b>\$13,702</b>	<b>\$40,483</b>	<b>\$17,727</b>	<b>\$175,402</b>	<b>\$1,897,919</b>
Return on Balances						566,969
<b>Expenditure Totals</b>						<b>\$2,464,888</b>

<sup>5</sup> The Return on Balances amount, on a system basis, reflects the sum of the North Carolina specific return calculated on the North Carolina deferral balance and the South Carolina specific return on the South Carolina deferral balance.

**Rule R8-69(f)(1)(iii)b - Cost savings directly attributable to measures**

**Rule R8-69 (f) Filing Requirements and Procedure.**

- (1) Each electric public utility shall submit to the Commission all of the following information and data in its application:
  - (iii) For each measure for which cost recovery is requested through the DSM/EE EMF rider:
    - b. total costs that the utility did not incur for the test period as a direct result of the measure in the aggregate and broken down by type of cost per appropriate capacity, energy and measure unit metric, and the proposed jurisdictional allocation factors, as well as any changes in the estimated future amounts since last filed with the Commission;

Other than the Company's CFL Program, there were no measures for which the Company is requesting cost recovery through the DSM/EE EMF rider in service during the test period extending from August 21, 2007 through March 31, 2008. The estimated fuel savings for the CFL program during the test period is \$84,666 which translates into the metric \$36.63 per MWh.

Whenever possible, costs are directly assigned. However, when this is not practical, jurisdictional allocation factors are employed. The Company's proposed jurisdictional allocation factors for the test period, August 21, 2007 through March 31, 2008, are provided in the following table:

Measure/Program Category	North Carolina
<b>Demand Side Management (DSM)</b>	
DSDR Implementation	85.0%
EnergyWise	85.0%
<b>Energy Efficiency Programs</b>	
CIG New Construction	83.7%
CIG Retrofit	83.7%
Residential New Construction	83.7%
CFL Program	83.7%
<b>Other DSM/EE Activities</b>	
DSM / EE A&G	84.6%

**Rule R8-69(f)(1)(iii)c - Measurement and verification activities for test period**

**Rule R8-69 (f) Filing Requirements and Procedure.**

- (1) Each electric public utility shall submit to the Commission all of the following information and data in its application:
    - (iii) For each measure for which cost recovery is requested through the DSM/EE EMF rider:
      - c. a description of, the results of, and the costs of all measurement and verification activities conducted in the test period;
- 

With the exception of the Company's CFL Program, there were no measures for which the Company is requesting cost recovery through the DSM/EE EMF rider in service during the test period extending from August 21, 2007 through March 31, 2008. As such, measurement and verification activities were not in place for these programs during the test period.

The Company employed Summit Blue Consulting, LLC, to evaluate its "CFL Buy Down Program". Summit Blue's resulting impact evaluation, while received outside of the test period, did confirm the reasonableness of the Company's estimates.

**Rule R8-69(f)(1)(iii)d - Test period summer and winter peak demand reductions**

**Rule R8-69 (f) Filing Requirements and Procedure.**

- (1) Each electric public utility shall submit to the Commission all of the following information and data in its application:
    - (iii) For each measure for which cost recovery is requested through the DSM/EE EMF rider:
      - d. total summer and winter peak demand reduction per appropriate capacity, energy, and measure unit metric and in the aggregate, as well as any changes in estimated future amounts;
- 

With the exception of the Company's CFL Program, there were no measures for which the Company is requesting cost recovery through the DSM/EE EMF rider in service during the test period extending from August 21, 2007 through March 31, 2008. As such, the requested information will be made available for programs when in service experience is available in subsequent cost recovery requests. In addition, there are no changes in estimated future values relative to information supplied previously to the Commission.

Estimates of summer and winter peak demand reductions for the Company's CFL Program have been provided in the accompanying response to Commission Rule R8-69(f)(1)(ii)d.

## **Rule R8-69(f)(1)(iii)e - Test period energy reductions**

### **Rule R8-69 (f) Filing Requirements and Procedure.**

- (1) Each electric public utility shall submit to the Commission all of the following information and data in its application:
  - (iii) For each measure for which cost recovery is requested through the DSM/EE EMF rider:
    - e. total energy reduction in the aggregate and per appropriate capacity, energy and measure unit metric, as well as any changes in the estimated future amounts since last filed with the Commission;

---

With the exception of the Company's CFL Program, there were no measures for which the Company is requesting cost recovery through the DSM/EE EMF rider in service during the test period extending from August 21, 2007 through March 31, 2008. As such, the requested information will be made available for programs when in service experience is available in subsequent cost recovery requests. In addition, there are no changes in estimated future values relative to information supplied previously to the Commission.

The estimated energy impacts for the Company's CFL Program have been provided in the accompanying response to Commission Rule R8-69(f)(1)(ii)e.

### **Rule R8-69(f)(1)(iii)f - Test period findings and results of measures**

#### **Rule R8-69 (f) Filing Requirements and Procedure.**

- (1) Each electric public utility shall submit to the Commission all of the following information and data in its application:
    - (iii) For each measure for which cost recovery is requested through the DSM/EE EMF rider:
      - f. a discussion of the findings and the results of the program or measure;
- 

Other than for the Company's CFL Program, there were no measures for which the Company is requesting cost recovery through the DSM/EE EMF rider in service during the test period extending from August 21, 2007 through March 31, 2008. Discussions of findings and results of programs and/or measures will be provided in subsequent recovery requests.

The Company employed Summit Blue Consulting, LLC, to evaluate its "CFL Buy Down Program". Summit Blue's resulting impact evaluation indicated that this program achieved annualized energy savings of 6,706 MWh, a 630 kW summer peak demand savings. The impact evaluation also indicated that these savings are expected to persist for ten years.



**Rule R8-69(f)(1)(iii)g - Evaluation of event based measure during test period**

**Rule R8-69 (f) Filing Requirements and Procedure.**

- (1) Each electric public utility shall submit to the Commission all of the following information and data in its application:
    - (iii) For each measure for which cost recovery is requested through the DSM/EE EMF rider:
      - g. evaluations of event-based programs including the date, weather conditions, event trigger, number of customers notified and number of customers enrolled; and
- 

There were no event based measures, for which the Company is requesting cost recovery through the DSM/EE EMF rider in service during the test period extending from August 21, 2007 through March 31, 2008. As such, no event based programs were activated during the test period. The Company's current estimates of event based measure impacts are provided in responses to Commission Rules R8-69(f)(1)(ii)d and R8-69(f)(1)(ii)e.

## **Rule R8-69(f)(1)(iii)h – Comparison of impact estimates**

### **Rule R8-69 (f) Filing Requirements and Procedure.**

- (1) Each electric public utility shall submit to the Commission all of the following information and data in its application:
    - (iii) For each measure for which cost recovery is requested through the DSM/EE EMF rider:
      - h. a comparison of impact estimates presented in the measure application from the previous year, those used in reporting for previous measure years, and an explanation of significant differences in the impacts reported and those previously found or used.
- 

With the exception of the Company's CFL Program, there were no measures, for which the Company is requesting cost recovery through the DSM/EE EMF rider, in place during the test period extending from August 21, 2007 through March 31, 2008. In addition, there were no impact estimates in measure applications or reports submitted by the Company in the prior year. This absence of previously reported impact estimates includes the Company's CFL Program.

## Rule R8-69(f)(1)(iv) – Determination of utility incentives

### Rule R8-69 (f) Filing Requirements and Procedure.

- (1) Each electric public utility shall submit to the Commission all of the following information and data in its application:
    - (iv) For each measure for which recovery of utility incentives is requested, a detailed explanation of the method proposed for calculating those utility incentives, the actual calculation of the proposed utility incentives, and the proposed method of providing for their recovery and true-up through the annual rider. If recovery of net lost revenues is requested, the total net lost kWh sales and net lost revenues per appropriate capacity, energy, and program unit metric and in the aggregate for the test period, and the proposed jurisdictional allocation factors, as well as any changes in estimated future amounts since last filed with the Commission.
- 

The Company's proposed utility incentives can be broken down into three categories. These are (1) net lost revenues, (2) specific incentives for demand side management (DSM) programs, and (3) specific incentives for energy efficiency (EE) programs. The proposed mechanisms associated with these incentives are described below and the specific calculations are included as a part of the Company's supporting workpapers.

#### A. Net Lost Revenues

Net lost revenues are determined by multiplying lost sales by a net lost revenue rate.

$$\text{Net Lost Revenues} = \text{Lost Sales} \times \text{Net Lost Revenue Rate}$$

Lost Sales are those sales that do not occur by virtue of employing the DSM / EE measures. These values are initially based on estimates and subsequently confirmed through the measurement and verification (M&V) process.

Net Lost Revenue Rate is difference between the average retail rate applicable to the customer class impacted by the measure and (1) the related customer charge component of that rate, (2) the fuel component of the rate, and (3) the incremental variable O&M rate. When multiple customer classes are impacted by the DSM / EE measures, a weighted or system wide net lost revenue rate is employed.

#### B. DSM Utility Incentive

For DSM programs, the Company has proposed an incentive equal to 50 % of the net present value of the DSM program savings based upon the Utility Cost Test ("UCT"). The UCT is an industry standard test, which compares the costs incurred by a utility in offering a DSM/EE program to the benefits as measured by the costs avoided by the utility. Since the UCT looks at the cost to the utility and utilizes the traditional concept of least cost provisioning, use of the test will provide appropriate incentives to PEC but, at the same time, encourage the Company to pursue least cost alternatives.

PEC proposes that the incentive amount be recovered over a 10-year period. For DSM programs, PEC will determine an incentive per kW saved using the forecast upon which the cost/benefit tests are based. This incentive per kW will be applied to actual peak demand reductions achieved in each year, such that if PEC achieves the targeted demand reduction of the program, the company will receive 100% of the target incentive. If PEC achieves less kW of demand reduction than projected, the incentive will be proportionally less. If PEC achieves more kW of demand reduction than projected, the incentive will be proportionally more. The incentive will be collected through a charge per kWh.

**C. EE Utility Incentive**

As with its DSM programs, the Company has proposed an incentive equal to 50 % of the net present value of the EE program savings based upon the Utility Cost Test ("UCT").

For EE programs, PEC will use a similar methodology, but will solve for a rate per MWh of energy reduction achieved, such that if the company achieves the targeted energy reduction of the program, the company will receive 100% of the target incentive. Again, if PEC achieves fewer MWh of reduction than expected, the incentive will be proportionally less. If PEC achieves more MWh of reduction than expected, the incentive will be proportionally more.

Estimates of lost sales quantities for the Company's system are provided in the following table. They have been segmented into the recovery periods.

Program / Measure	Sales Loss For Purposes of Lost Revenue Calculation (kWh) - System		
	Test Period (8/21/07 through 3/31/08)	Prospective Period (1/1/08 through 7/31/08)	Rate Period (12/1/08 through 11/30/09)
<b>Demand-Side Management Programs</b>			
DSDR Implementation	-	-	1,581,200
EnergyWise	-	-	235,600
<b>Energy Efficiency Programs</b>			
Res New Construction	-	-	3,482,500
CIG New Construction	-	-	1,639,800
CIG Retrofit	-	-	5,285,500
CFL	2,185,400	2,185,400	6,556,200
<b>Total Reduction in Energy (kWh)</b>	<b>2,185,400</b>	<b>2,185,400</b>	<b>18,780,800</b>

The following table provides calculated North Carolina jurisdictional utility incentives for the Company's test period (8/21/07 through 3/31/08).

Program / Measure	Utility Incentives (North Carolina Only) - Test Period (8/21/07 through 3/31/08)			
	Net Lost Revenue	Capacity Incentive	Energy Incentive	Total
<b>Demand-Side Management Programs</b>				
DSDR Implementation	-	-	-	
EnergyWise	-	-	-	
<b>Energy Efficiency Programs</b>				
Res New Construction	-	-	-	
CIG New Construction	-	-	-	
CIG Retrofit	-	-	-	
CFL	105,420	-	67,762	173,182
<b>Total Utility Incentives Including Net Lost Revenue</b>	<b>\$105,420</b>		<b>\$67,762</b>	<b>\$173,182</b>

The following table provides calculated North Carolina jurisdictional utility incentives for the Company's "prospective" period (4/1/08 through 7/31/08).

Program / Measure	Utility Incentives (North Carolina Only) - Prospective Period (4/1/08 through 7/31/08)			
	Net Lost Revenue	Capacity Incentive	Energy Incentive	Total
<b>Demand-Side Management Programs</b>				
DSDR Implementation	-	-	-	
EnergyWise	-	-	-	
<b>Energy Efficiency Programs</b>				
Res New Construction	-	-	-	
CIG New Construction	-	-	-	
CIG Retrofit	-	-	-	
CFL	106,772	-	68,631	175,402
<b>Total Utility Incentives Including Net Lost Revenue</b>	<b>\$106,772</b>		<b>\$68,631</b>	<b>\$175,402</b>

The following table provides calculated North Carolina jurisdictional utility incentives for the Company's rate period (12/1/08 through 11/30/09).

Program / Measure	Utility Incentives (North Carolina Only) - Rate Period (12/1/08 through 11/30/09)			
	Net Lost Revenue	Capacity Incentive	Energy Incentive	Total
<b>Demand-Side Management Programs</b>				
DSDR Implementation	\$63,753	\$553,963	-	\$ 617,716
EnergyWise	11,759	4,717,668	-	4,729,427
<b>Energy Efficiency Programs</b>				
Res New Construction	167,331	-	230,693	398,024
CIG New Construction	63,511	-	48,817	112,328
CIG Retrofit	204,714	-	105,220	309,934
CFL	319,981	-	205,893	525,874
<b>Total Utility Incentives Including Net Lost Revenue</b>	<b>\$831,049</b>	<b>\$5,271,631</b>	<b>\$590,613</b>	<b>\$6,693,303</b>

The Company's proposed jurisdictional allocation factors for the test period, August 21, 2007 through March 31, 2008, are provided in the following table:

Measure/Program Category	North Carolina
<b>Demand Side Management (DSM)</b>	
DSDR Implementation	85.0%
EnergyWise	85.0%
<b>Energy Efficiency Programs</b>	
CIG New Construction	83.7%
CIG Retrofit	83.7%
Residential New Construction	83.7%
CFL Program	83.7%

**Rule R8-69(f)(1)(v) – Actual revenue from DSM/EE and DSM/EE EMF riders**

**Rule R8-69 (f) Filing Requirements and Procedure.**

- (1) Each electric public utility shall submit to the Commission all of the following information and data in its application:
    - (v) Actual revenues produced by the DSM/EE rider and the DSM/EE EMF rider established by the Commission during the test period and for all available months immediately preceding the rate period.
- 

The Company did not have a DSM/EE rider or DSM/EE EMF in effect during the test period extending from August 21, 2007 through March 31, 2008.

## Rule R8-69(f)(1)(vi) – Proposed DSM/EE and DSM/EE EMF riders

### Rule R8-69 (f) Filing Requirements and Procedure.

(1) Each electric public utility shall submit to the Commission all of the following information and data in its application:

(vi) The requested DSM/EE rider and DSM/EE EMF rider and the basis for their determination.

Attached to this document is NC Rider BA-1 (Annual Billing Adjustments). Detailed information regarding the determination of the DSM/EE and DSM/EE EMF factors has been provided as a part of the attached testimony of Robert P. Evans. The following table provides a summary of the Company's requested DSM/EE rates.

Rate Class	DSM /EE Rate	DSM /EE EMF	DSM /EE Annual Rider
Residential	0.165¢/kWh	0.025¢/kWh	0.190¢/kWh
Small General Service	0.167¢/kWh	0.025¢/kWh	0.192¢/kWh
Medium General Service	0.140¢/kWh	0.021¢/kWh	0.161¢/kWh
Large General Service	0.101¢/kWh	0.016¢/kWh	0.117¢/kWh
Lighting	0.037¢/kWh	0.007¢/kWh	0.044¢/kWh



Carolina Power & Light Company  
d/b/a Progress Energy Carolinas, Inc.  
(North Carolina Only)

ANNUAL BILLING ADJUSTMENTS  
RIDER BA-1

APPLICABILITY – RATES INCLUDED IN TARIFF CHARGES

The rates shown below are included in the MONTHLY RATE provision in each schedule identified in the table below:

Billing Adjustment Factors (¢/kWh)*					
Rate Class	Fuel Adjustment		DSM/EE Adjustment		Net Adjustment
	Rate <sup>(1)</sup>	EMF <sup>(2)</sup>	Rate <sup>(3)</sup>	EMF <sup>(4)</sup>	
<b>Residential</b>			0.170	0.026	
Applicable to Schedules: RES, R-TOUD & R-TOUE					
<b>Small General Service</b>			0.173	0.026	
Applicable to Schedules: SGS & TSS					
<b>Medium General Service</b>			0.145	0.022	
Applicable to Schedules: MGS, SGS-TOU, SI, CH-TOUE, GS-TES, APH-TES, CSG, CSE & Riders 66 & SS (less than 1 MW)					
<b>Large General Service</b>			0.104	0.017	
Applicable to Schedules: LGS, LGS-TOU, LGS-RTP and Riders 66 & SS (1 MW and greater)					
<b>Lighting</b>			0.038	0.007	
Applicable to Schedules: ALS, SLS, SLR & SFLS					

\* Billing Adjustment Factors, shown above, include North Carolina gross receipts taxes.

Billing Adjustment Factors Description:

- (1) The Fuel Adjustment Rate is adjusted annually to reflect incremental changes in the costs of fuel and fuel-related costs from the rates approved in the last general rate case.
- (2) The Fuel Adjustment Experience Modification Factor (EMF) is adjusted annually to reflect the difference between reasonable and prudently incurred fuel and fuel-related costs and the fuel and fuel-related revenues realized during a test period under review and shall remain in effect for a fixed 12 month period.
- (3) The Demand Side Management/Energy Efficiency (DSM/EE) Rate is adjusted annually to reflect the costs and incentives associated with demand side management and energy efficiency measures and programs approved by the North Carolina Utilities Commission.
- (4) The Demand Side Management/Energy Efficiency Experience Modification Factor (DSM/EE EMF) is adjusted annually to reflect the difference between reasonable and prudently incurred DSM/EE costs and incentives and DSM/EE revenues realized during the period under review and shall remain in effect for a fixed 12 month period.

Demand Side Management/Energy Efficiency “Opt-Out” Option

North Carolina Utilities Commission Rule R8-69(e) allows commercial customers with annual consumption of 1,000,000 kWh or greater in the billing months of the prior calendar year and all industrial customers to elect to not participate in any utility-offered DSM/EE program and, after written notification to the utility, not be subject to the DSM/EE Rate and EMF, shown above. For purposes of application of this option, a customer is defined to be a metered account billed under a single application of a Company rate tariff. Since these rates are included in the rate tariff charges, Customers electing this option shall receive the following DSM/EE Credit on their monthly bill statement:

$$\text{DSM/EE Credit} = \text{DSM/EE Rate Credit} + \text{DSM/EE EMF Credit}$$

Where:

$$\text{DSM/EE Rate Credit} = \text{Billed kWh} \times \text{DSM/EE Rate}^*$$

$$\text{DSM/EE EMF Credit} = \text{Billed kWh} \times \text{DSM/EE EMF Rate}^*$$

\* The DSM/EE Rate and EMF shall be as shown in the above table for the schedule applicable to Customer’s monthly bill.

Following the December bill each year, usage for commercial accounts electing to “opt-out” of the DSM/EE rates shall be reviewed and the customer shall be notified and removed from the “opt-out” option if annual consumption is less than 1,000,000 kWh in the prior twelve months.

APPLICABILITY – RATES NOT INCLUDED IN TARIFF CHARGES

The rates shown below are not included in the MONTHLY RATE provision of the applicable schedule used in billing and shall therefore be added to Customer’s monthly bill statement:

Billing Adjustment Factors Per Customer (\$/month)*			
Revenue Class	REPS Rate <sup>(5)</sup>	REPS EMF <sup>(6)</sup>	Net Billing Rate
Residential	\$per month	\$per month	\$per month
Commercial/Public Streets and Highways	\$per month	\$per month	\$per month
Industrial/Public Authority	\$per month	\$per month	\$per month

\* Billing Adjustment Factors, shown above, include North Carolina gross receipts taxes.

For purposes of the applicability of the REPS-related Billing Adjustment Factors, a “Customer” is defined as all accounts (metered and unmetered) serving the same customer of the same revenue classification located on the same or contiguous properties. Upon written notification from Customer, accounts meeting these criteria shall be combined under a single account number to allow Customer to receive only one monthly bill statement for all meters under the account and only one monthly REPS charge.

Billing Adjustment Factors Description:

- (5) The Renewable Energy Portfolio Standard (REPS) Rate is adjusted annually to reflect research and development costs and incremental costs incurred to comply with the state’s Renewable Energy and Energy Efficiency Portfolio Standard (REPS).

- (6) The Renewable Energy Portfolio Standard Experience Modification Factor (REPS EMF) Rate is adjusted annually to recover the difference between reasonable and prudently incurred REPS costs and REPS revenues realized during the period under review and shall remain in effect for a fixed 12 month period.

SALES TAX

To the above charges will be added any applicable North Carolina Sales Tax.

Effective for service rendered on and after December 1, 2008;

The DSM/EE EMF, Fuel Adjustment EMF and REPS EMF are effective for service rendered through November 30, 2009

NCUC Docket No. E-2, Subs 929, 930 & 931

**Rule R8-69(f)(1)(vii) – Projected NC retail sales for customers opting out of measures**

**Rule R8-69 (f) Filing Requirements and Procedure.**

- (1) Each electric public utility shall submit to the Commission all of the following information and data in its application:
  - (vii) Projected North Carolina retail monthly kWh sales for the rate period for all industrial and large commercial accounts, in the aggregate, that are not assessed the rider charges as provided in this rule.

For the purpose of its initial filing, the Company has assumed that all industrial and all large commercial accounts capable of opting out, will opt out. The following table provides the Company's estimate of North Carolina retail monthly kWh sales in the aggregate, that will not be assessed DSM/EE or DSM/EE EMF rider charges as provided for in Commission Rule R8-69.

**Aggregate Industrial & Large Commercial Sales Not Assessed Rider Charges**

Month	Estimated kWh
Dec-08	1,185,094,390
Jan-09	1,182,619,075
Feb-09	1,251,853,261
Mar-09	1,158,314,252
Apr-09	1,241,559,795
May-09	1,226,114,971
Jun-09	1,294,544,632
Jul-09	1,396,379,402
Aug-09	1,389,049,864
Sep-09	1,365,646,034
Oct-09	1,375,764,434
Nov-09	1,271,804,507
<b>Total</b>	<b>15,338,744,616</b>

## **Rule R8-69(f)(1)(viii) – Supporting workpapers**

### **Rule R8-69 (f) Filing Requirements and Procedure.**

- (1) Each electric public utility shall submit to the Commission all of the following information and data in its application:
    - (viii) All workpapers supporting the calculations and adjustments described above
- 

Workpapers supporting calculations and adjustments have been attached to this document.

## **Rule R8-69(f)(2) – Workpapers and testimony**

### **Rule R8-69 (f) Filing Requirements and Procedure.**

- (2) Each electric public utility shall file the information required under this rule, accompanied by workpapers and direct testimony and exhibits of expert witnesses supporting the information filed in this proceeding, and any change in rates proposed by the electric utility, by the date specified in subdivision (e)(2) of this rule. An electric public utility may request a rider lower than that to which its filed information suggests that it is entitled.
- 

The testimony and exhibits of Robert P. Evans are elements of this request. Information detailing the development of the Company's proposed DSM/EE and DSM/EE EMF rates are provided as a part of Mr. Evans' testimony.

263696

**NORTH CAROLINA UTILITIES COMMISSION**

**DOCKET NO. E-2, SUB 931**

**OFFICIAL COPY**

**DIRECT TESTIMONY OF ROBERT P. EVANS  
ON BEHALF OF CAROLINA POWER & LIGHT COMPANY  
D/B/A/ PROGRESS ENERGY CAROLINAS, INC.**

**FILED**

**JUN 06 2008**

*Clerk's Office  
N.C. Utilities Commission*

1 **Q. PLEASE STATE YOUR NAME, YOUR BUSINESS ADDRESS AND THE**  
2 **BUSINESS RELATIONSHIP WITH PROGRESS ENERGY CAROLINAS, INC..**

3 A. My name is Robert P. Evans and my business address is 411 Fayetteville Street, Post  
4 Office Box 1551, Raleigh, North Carolina 27602. I am employed by Progress Energy  
5 Carolinas, Inc. ("PEC") as a Senior Energy Delivery Project Specialist in the Energy  
6 Delivery Department.

7 **Q. PLEASE BRIEFLY STATE YOUR EDUCATIONAL BACKGROUND AND**  
8 **EXPERIENCE.**

9 A. I graduated from Iowa State University ("ISU") in 1978 with a Bachelor of Science Degree  
10 in Industrial Administration and a minor in Industrial Engineering. As a part of my  
11 undergraduate work, I participated in both the graduate level Regulatory Studies Programs  
12 sponsored by American Telephone and Telegraph Corporation and graduate level study  
13 programs in Engineering Economics. Subsequent to my graduation from ISU, I received  
14 additional Engineering Economics training at the Colorado School of Mines, completed the  
15 NARUC Regulatory Studies program at Michigan State, and completed the Advanced  
16 AGA Ratemaking program at the University of Maryland. I am currently working on a

1 Renewable Energy Technology certification from North Carolina State University. Upon  
2 graduation from ISU, I joined the Iowa State Commerce Commission, now known as the  
3 Iowa Utility Board ("IUB"), in the Rates and Tariffs Section of the Utilities Division.  
4 During my tenure with the IUB, I held several positions, including Senior Rate Analyst in  
5 charge of Utility Rates and Tariffs and Assistant Director of the Utility Division. In those  
6 positions I provided testimony in gas, electric, water and telecommunications proceedings  
7 as an expert witness in the areas of rate design, service rules, and tariff applications. In  
8 1982, I accepted employment with City Utilities of Springfield, Missouri, as an Operations  
9 Analyst. In that capacity, I provided support for rate-related matters associated with the  
10 municipal utility's gas, electric, water and sewer operations. In addition, I worked closely  
11 with its load management and energy conservation programs. In 1983, I joined the Rate  
12 Services staff of the Iowa Power and Light Company, now known as MidAmerican  
13 Energy, as a Rate Engineer. In this position, I was responsible for the preparation of rate  
14 related filings and presented testimony on rate design, service rules, and accounting issues  
15 before the IUB. In 1986, I accepted employment with Tennessee-Virginia Energy  
16 Corporation, which is now known as the United Cities Division of ATMOS Energy, as  
17 Director of Rates and Regulatory Affairs. While in this position, I was responsible for  
18 regulatory filings, regulatory relations, and customer billing. In 1987, I went to work for  
19 the Virginia State Corporation Commission in the Division of Energy Regulation as a  
20 Utilities Specialist. In this capacity I worked with electric and natural gas issues and  
21 provided testimony on cost of service and rate design matters brought before that  
22 regulatory body. In 1988, I joined North Carolina Natural Gas Corporation ("NCNG") as  
23 its Manager of Rates and Budgets. Subsequently, I was promoted to Director-Statistical



1 Services in its Planning and Regulatory Compliance Department. In that position, I  
2 performed a variety of work associated with financial, regulatory, statistical analysis, and  
3 presented testimony on a variety of issues before the North Carolina Utilities Commission.  
4 I held that position until the closing of NCNG's merger with Carolina Power and Light  
5 Company, the predecessor of Progress Energy Corporation, on July 15, 1999.

6 From July 1999 through January 2008 I was employed in Principal and Senior Analyst  
7 roles by the Progress Energy Service Company, LLC. In these roles I provided NCNG,  
8 Progress Energy Carolinas, Inc., Progress Energy Florida, Inc. with rate and regulatory  
9 support in their state and federal venues and financial forecasting.

10 **Q. WHAT ARE YOUR CURRENT RESPONSIBILITIES?**

11 A. I am responsible for financial analysis and support of PEC's Energy Efficiency (EE) and  
12 Demand Side Management (DSM) programs.

13 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

14 A. The purpose of my testimony is to explain and support PEC's Application for a DSM/EE  
15 cost recovery rider and Experience Modification Factor ("EMF") and provide the  
16 information required by Commission Rule R8-69.

17 **Q. ARE YOU SPONSORING PEC'S DSM/EE COST RECOVERY RIDER  
18 APPLICATION?**

19 A. Yes. In addition to this testimony and accompanying exhibits, I am sponsoring PEC'S  
20 DSM/EE Cost Recovery Rider Application identified as PEC Exhibit No. 1.

21

1 **JURISDICTIONAL COST ALLOCATION**

2 **Q. HOW ARE DEMAND SIDE MANAGEMENT AND ENERGY EFFICIENCY**  
3 **(DSM/EE) COSTS ALLOCATED TO THE NORTH CAROLINA RETAIL**  
4 **JURISDICTION?**

5 A. DSM/EE costs are reviewed monthly and allocated to the appropriate retail jurisdiction.  
6 Costs are directly assigned to the jurisdiction whenever the program benefits only one  
7 jurisdiction. Costs that offer a system benefit are allocated based upon the primary  
8 emphasis of the program. The allocation of these costs recognizes that EE programs  
9 emphasize an overall reduction on energy consumption while DSM programs emphasize an  
10 overall reduction on the system peak demand. This approach applies to all costs regardless  
11 of whether they relate to the DSM/EE rider or the EMF.

12 **Q. PLEASE ELABORATE ON THE METHODOLOGY USED TO ALLOCATE**  
13 **DSM/EE COSTS THAT OFFER A SYSTEM BENEFIT.**

14 A. PEC first reviews all costs to be recovered and separates them into three categories: (1) EE-  
15 related costs, (2) DSM-related costs and (3) general administrative (A&G) costs that  
16 support both EE and DSM programs. Since A&G costs relate to both EE and DSM, they  
17 are divided into these two categories. The division of these costs into either the EE or  
18 DSM category is based upon the percentage of each type of expenditure anticipated during  
19 the next forecast calendar year. For example, if 30% of these costs in the forecast period  
20 are EE-related, then 30% of the A&G costs will be considered as EE-related costs for  
21 allocation purposes. The use of a forecast period recognizes the types of new programs  
22 PEC will offer in the immediate future that will be supported by these administrative costs.  
23 The assignment of A&G costs as either EE or DSM related is reviewed annually each June

1 based upon forecast costs for the next calendar year. Historic general administrative costs  
2 in this proceeding have been assigned to the appropriate category based upon forecasted EE  
3 and DSM costs for 2009.

4 **Q. HOW ARE COSTS IDENTIFIED AS EE-RELATED ALLOCATED TO THE**  
5 **JURISDICTION?**

6 A. Any program costs that are identified as being EE-related, including A&G costs, are  
7 allocated to NC retail operations based upon the ratio of NC retail sales to PEC system  
8 retail sales using results from the annual per books cost of service study. The allocation  
9 percentage is updated each May to reflect the study results filed with the Commission in  
10 April. In this proceeding, the energy allocation reflects the 2006 per books cost of service  
11 study for the period August 21, 2007 through April 30, 2008 and the 2007 per books cost of  
12 service study for the period thereafter.

13 **Q. HOW ARE COSTS IDENTIFIED AS DSM-RELATED ALLOCATED TO THE**  
14 **JURISDICTION?**

15 A. Any program costs that are identified as being DSM-related, again including assigned  
16 A&G costs, are allocated to NC retail based upon the ratio of the NC retail peak demand to  
17 the PEC system retail peak demand using data supporting the annual per books cost of  
18 service study. The allocation percentage is updated each May to reflect the annual cost of  
19 service study results filed with the Commission in April. In this proceeding, the demand  
20 allocation reflects the summer coincident peak used in the 2006 per books cost of service  
21 study for the period August 21, 2007 through April 30, 2008 and the 2007 per books cost of  
22 service study thereafter.

1 **Q. ARE YOU PROPOSING THAT DSM/EE COSTS BE RECOVERED SOLELY**  
2 **FROM RETAIL CUSTOMERS AND, IF SO, WHY DO YOU BELIEVE THAT TO**  
3 **BE APPROPRIATE?**

4 A. Yes, I am. Senate Bill 3 recognizes that large customers perform their own analyses  
5 regarding DSM/EE initiatives and implement, at their own expense, those initiatives that are  
6 determined to be economic. Therefore, large customers do not need to participate in a  
7 utilities' DSM/EE programs. As a result, Senate Bill 3 allows these customers to "opt-out"  
8 of paying for the utility's DSM/EE program costs. PEC's wholesale customers are similar to  
9 PEC's industrial customers. They perform their own DSM/EE analyses and implement those  
10 programs that are economic and beneficial at their own expense. Therefore they should not  
11 be assigned costs related to PEC's retail programs. For example, many wholesale customers  
12 already offer appliance control and other programs designed to reduce the system peak.  
13 Although the wholesale customers may individually choose to implement DSM/EE programs  
14 similar to those offered by PEC, such programs would be funded solely by the wholesale  
15 customer, not PEC. Thus, PEC's wholesale customers should not be expected to pay for  
16 programs that solely target participation to PEC's retail customers while the cost for the  
17 wholesale customer's programs must be borne solely by the wholesale customer's  
18 consumers. In addition, N.C. Gen. Stat. § 62-133.9(e) provides that utilities shall assign the  
19 costs of DSM/EE the programs only to the class or classes of customers that directly benefit  
20 from the programs. PEC's wholesale customers do not directly benefit from PEC's DSM/EE  
21 programs.

22 In fact, to the extent retail EE/DSM programs reduce retail usage and demand, system costs  
23 will automatically be shifted to the wholesale jurisdiction due to changes in allocation

1 factors. Since wholesale customer will not participate in any of PEC's DSM/EE programs,  
2 they will not have the opportunity to benefit from the reduced usage and demand created by  
3 the programs.

4 **Q. HOW DO INVESTOR OWNED UTILITIES IN OTHER JURISDICTIONS**  
5 **ALLOCATE DSM/EE COSTS?**

6 A. The jurisdictions that we reviewed allocate costs consistent with PEC's proposed method.  
7 In fact, PEC surveyed EEI members with this question of allocation of DSM/EE costs. All  
8 of the respondents, total of nine, indicated that they did not allocate any costs to the  
9 wholesale jurisdiction.

10 **SUMMARY OF DSM/EE COSTS**

11 **Q. CAN YOU PROVIDE A SUMMARY OF THE COSTS THE COMPANY IS**  
12 **REQUESTING TO RECOVER IN THIS PROCEEDING?**

13 A. Yes. The Company's requested jurisdictionally allocated North Carolina DSM/EE costs  
14 associated with this proceeding have been broken into three discrete periods. For the test  
15 period, extending from August 21, 2007 through March 31, 2008, the Company is  
16 requesting recovery of \$3,273,285. For the rate period, extending from December 1, 2008  
17 through November 30, 2009, the Company is requesting recovery of \$36,864,860. An  
18 estimated amount of \$2,464,888 is being requested for the prospective period extending  
19 from the end of the test period through July 31, 2008. These prospective period estimates  
20 will be replaced by actual amounts at least 30-days prior to the hearing date in this  
21 proceeding.

1 A summary of the costs associated with the Company's recovery request is provided in the  
 2 following table, which has been broken down by the aforementioned time periods and by  
 3 DSM/EE measures.

4

Program / Measure	Test Period	Prospective Period	Rate Period
<b>Demand-Side Management Programs</b>			
DSDR Implementation	\$ 438,070	\$ 555,299	\$10,227,393
EnergyWise	175,918	287,928	13,777,668
<b>Energy Efficiency Programs</b>			
Res New Construction	\$ 28,041	\$42,327	\$ 1,690,177
CIG New Construction	-	-	999,761
CIG Retrofit	-	92,204	3,866,342
CFL Program	442,079	183,596	525,874
<b>A&amp;G and Carrying Costs</b>			
A&G	2,109,823	736,566	3,801,951
Carrying Cost on Balances	79,354	566,969	1,975,696
<b>Total Cost</b>	<b>\$ 3,273,285</b>	<b>\$2,464,888</b>	<b>\$36,864,860</b>

5 In addition to the summary table above, a further breakdown by cost element including  
 6 utility incentives, is provided on attached Evans Exhibit No. 1.

7 **UTILITY INCENTIVES**

8 **Q. HOW WERE THE UTILITY INCENTIVES CALCULATED?**

9 A. The Company's proposed utility incentives can be broken down into two categories. These  
 10 are (1) incentive to create future benefits based on achieved kW for DSM programs or kWh  
 11 for EE programs and (2) net lost revenues.

12 For DSM programs, the Company has proposed an incentive equal to 50 % of the net  
 13 present value of the DSM program savings based upon the Utility Cost Test ("UCT"). The  
 14 UCT is an industry standard test, which compares the costs incurred by a utility in offering  
 15 a DSM/EE program to the benefits as measured by the costs avoided by the utility. Since  
 16 the UCT looks at the cost to the utility and utilizes the traditional concept of least cost

1 provisioning, use of the test combined with the Company's proposed utility incentives, will  
2 encourage the Company to pursue least cost alternatives.

3 PEC proposes that the incentive amount be recovered over a 10-year period. For DSM  
4 programs, PEC will determine an incentive per kW saved using the forecast upon which the  
5 cost/benefit tests are based. This incentive per kW will be applied to actual peak demand  
6 reductions achieved in each year. Thus, if PEC achieves the targeted demand reduction of  
7 the program, the Company will receive 100% of the target incentive. If PEC achieves less  
8 kW of demand reduction than projected, the incentive will be proportionally less. If PEC  
9 achieves more kW of demand reduction than projected, the incentive will be proportionally  
10 more. The incentive will be collected through a charge per kWh. An example of this  
11 incentive calculation is provided on Part A of Evans Exhibit No. 2. As in the Company's  
12 proposal, the target utility incentive in this example is based upon 50% of the UCT result of  
13 \$200,000. The incentive rate on line 5 of this section is calculated so that the recovery of  
14 \$100,000 target incentive, in current dollars, is achieved during the initial ten-year period  
15 using the cumulative MW savings from the program request. Using this example, if the  
16 2009 target of 10 MW is achieved, an incentive of \$3,115 would be provided to the  
17 Company.

18 Consistent with its proposal for DSM programs, the Company has proposed an EE Utility  
19 Incentive equal to 50 % of the net present value of the EE program savings based upon the  
20 Utility Cost Test ("UCT").

21 For EE programs, PEC will use a similar methodology, but will solve for a rate per MWh  
22 of energy reduction achieved. Accordingly, if the Company achieves the targeted energy  
23 reduction of the program, the Company will receive 100% of the target incentive. Again, if

1        PEC achieves fewer MWh of reduction than expected, the incentive will be proportionally  
2        less. If PEC achieves more MWh of reduction than expected, the incentive will be  
3        proportionally more. An example of this incentive calculation is provided on Part B of  
4        Evans Exhibit No. 2. As in the previous example, the target utility incentive is based upon  
5        50 % of the UCT result of \$200,000. The incentive rate on line 5 of this section is  
6        calculated so that the recovery of \$100,000 target incentive, in current dollars, is achieved  
7        during the initial ten-year period using the cumulative MWh savings from the program  
8        request. Using this example, if the 2009 target of 10 MWh is achieved, an incentive of  
9        \$3,115 would be provided to the Company.

10       Net lost revenues, which are applicable to both DSM and EE programs, are determined by  
11       multiplying lost sales by a net lost revenue rate.

$$12 \quad \text{NET LOST REVENUES} = \text{LOST SALES} \times \text{NET LOST REVENUE RATE}$$

13       Lost Sales are those sales that do not occur by virtue of employing the DSM / EE measures.  
14       These values are initially based on engineering estimates and/or past impact evaluations,  
15       with future periods based on updated impact evaluations conducted through the  
16       measurement and verification (M&V) activities and applied prospectively.

17       Net Lost Revenue Rate is the difference between the average retail rate applicable to the  
18       customer class impacted by the measure and (1) embedded gross receipts taxes, (2) the  
19       related average customer charge component of that rate, (3) the average fuel component of  
20       the rate, and (4) the incremental variable O&M rate as approved in the Company's last CSP  
21       tariff. When multiple customer classes are impacted by the DSM / EE measures, a  
22       weighted or system wide net lost revenue rate is employed. An example of this incentive  
23       calculation is provided on Part C of Evans Exhibit No. 2. To determine the Net Lost



1 Revenue Rate, gross receipts taxes, average customer charges, a variable O&M component,  
2 and average fuel costs are removed from the Company's rates. Reductions in sales,  
3 associated with DSM and EE programs are multiplied by this rate to make the Company  
4 whole with respect to its margins. In the example, the 10 MWh loss would equate to Net  
5 Lost Revenues of \$573.10.

6 **RATE DEVELOPMENT**

7 **Q. ONCE ALL RELEVANT COSTS ARE ALLOCATED TO NORTH CAROLINA**  
8 **AND IDENTIFIED AS BEING EITHER DSM/EE RELATED, HOW ARE RATES**  
9 **ESTABLISHED?**

10 A. PEC schedules are designed to establish three natural rate groups: Residential, General  
11 Service and Lighting. While all customers within both the Residential and Lighting groups  
12 have similar usage characteristics, this is not true for the General Service Class, which  
13 ranges from a small customer using a few hundred kWh per year to a huge industrial  
14 complex using millions of kWh per month. To address this diversity in usage, PEC  
15 proposes that the General Service Class be separated into three rate groups: Small General  
16 Service (small consumers below 30 kW being billed solely on kWh usage), Medium  
17 General Service (consumers being billed for both energy and demand with loads from 30  
18 kW to 999 kW) and Large General Service (customers using 1 MW or greater). PEC's  
19 tariffs easily fall within one of these five rate classes; therefore, this grouping supports a  
20 common rate design theory of grouping customers with similar usage characteristics.

21 **Q. CAN YOU IDENTIFY THE RATE TARIFFS THAT FALL WITHIN EACH RATE**  
22 **CLASS?**

1 A. The following table lists the schedules and riders proposed within each rate class:

Residential	Small General Service	Medium General Service	Large General Service	Lighting
RES R-TOUD R-TOUE	SGS TSS	MGS SGS-TOU SI GS-TES APH-TES CH-TOUE CSE CSG Riders 66 & SS (less than 1 MW)	LGS LGS-TOU LGS-RTP Riders 66 & SS (1 MW & Greater)	ALS SLS SLR SFLS

2 **Q. HOW ARE EE AND DSM RELATED COSTS ALLOCATED TO EACH RATE**  
3 **CLASS?**

4 A. PEC proposes to continue the philosophy used to allocate cost to the retail jurisdiction –  
5 EE-related costs will be allocated using an energy allocation while DSM-related costs will  
6 be allocated using a demand allocation, after each has been adjusted to reflect the impact of  
7 customers opting-out of the DSM annual rider.

8 **Q. HOW ARE SALES AND DEMAND ADJUSTED FOR THE IMPACT OF “OPT-**  
9 **OUT” CUSTOMERS?**

10 A. Commercial customers consuming 1,000,000 kWh per year and all industrial customers,  
11 regardless of usage, are eligible under Commission Rules to “opt-out” of the annual  
12 DSM/EE rider. PEC reviewed its customer records and identified 1,829 commercial  
13 customers consuming 4,965,064,184 kWh during the year ended March 31, 2008. For  
14 purposes of determining eligibility to “opt-out”, a customer is defined as a metered account  
15 billed under a single application of a rate tariff. Customers with multiple meters being  
16 billed separately will not be eligible to aggregate all of these meters to achieve “opt-out”

1 eligibility unless the customer is billed under the totalized metering option of the additional  
2 facilities plan. Also, if one metered account is eligible to “opt-out”, other meters at the  
3 same premise are not eligible to “opt-out” unless they also individually consume 1,000,000  
4 kWh per year. “Opt-out” eligibility will be reviewed each year after the December bill and  
5 only customers consuming 1,000,000 kWh or more in the calendar year will be eligible to  
6 “opt-out” of the next year’s DSM/EE Rider charges. New commercial customers will need  
7 to demonstrate during the prior calendar year that their consumption has exceeded  
8 1,000,000 kWh before they will be eligible to “opt-out”. This approach will eliminate the  
9 need to review consumption monthly, potentially forcing customers to “opt-in” or “opt-  
10 out” as annual usage vacillates around 1,000,000 kWh. A similar review identified  
11 industrial sales of 10,373,680,432 kWh eligible to “opt-out”. Rate Class allocation factors  
12 were developed assuming that all eligible customers opt-out of the DSM rider. If these  
13 customers do not choose the “opt-out”, any revenue gain will be returned to customers in  
14 next year’s EMF rider.

15 Commercial and industrial sales for the year ended March 31, 2008 for all customers  
16 eligible to “Opt-Out” of the DSM/EE rate are provided in Evans Exhibit No. 3.

17 **Q. THE SALES FOR “OPT-OUT” CUSTOMERS ARE EASILY IDENTIFIED, BUT**  
18 **HOW IS THE COINCIDENT PEAK OF THESE CUSTOMERS ESTIMATED?**

19 A. Metering currently installed for these customers does not provide usage data at the system  
20 peak hour; therefore, this impact is estimated based upon the ratio of “opt-out” sales to total  
21 sales for the rate class times the rate class peak demand. Since each rate group has similar  
22 usage characteristics this approach should accurately approximate the demand of “opt-out”  
23 accounts.

1 **Q. AFTER ADJUSTING ENERGY AND DEMAND FOR “OPT-OUT” CUSTOMERS,**  
2 **ARE THE RESULTING ALLOCATION FACTORS THEN USED TO**  
3 **DETERMINE REVENUE REQUIREMENTS FOR EACH RATE CLASS?**

4 A. Yes. The resulting Rate Class energy allocation factors are multiplied times the EE related  
5 costs and the resulting Rate Class demand allocation factors are multiplied times the DSM  
6 costs. The two rates are added to establish the DSM/EE rate for service rendered on and  
7 after December 1, 2008.

8 The energy allocation rate class factors were developed based upon the forecasted rate class  
9 usage for the rate recovery. The factors were developed after subtracting actual sales for  
10 “opt-out” customers for the year ended March 31, 2008 since usage for “opt-out”  
11 customers is not forecasted. The energy allocation factors applicable to each rate class  
12 based upon the forecast rate class sales for the recovery period of December 2008 through  
13 November 2009 are provided in Evans Exhibit No. 4.

14 The demand allocation rate class percentages were developed based upon the summer  
15 coincident peak for 2007 from the annual cost of service study, after subtracting the  
16 estimated demand for “opt-out” customers as discussed above. The forecast does not  
17 provide rate class coincident peak demands therefore the most recent historic data was  
18 deemed to be representative of future demand impacts. The demand allocation factors  
19 applicable to each rate class are provided in Evans Exhibit No. 5.

20 **Q. HOW ARE RATE CLASS DSM/EE RATES ESTABLISHED?**

21 A. PEC recommends that the rate class revenue requirement be recovered in the schedule  
22 energy rates. The sum of the resulting rate class EE and DSM revenue requirement is  
23 divided by rate class sales, after adjustment for “opt-out” customers, to establish the rate

1 class DSM/EE rate. Evans Exhibit No. 6 provides the Energy Efficiency Rate derivation.  
2 Evans Exhibit No. 7 provides the Demand Side Management Rate derivation.

3 **Q. PEC IS PROPOSING A DSM/EE RATE THAT RECOVERS PROGRAM COSTS,**  
4 **ANY NET LOST REVENUES, AND UTILITY INCENTIVES ALLOWED BY THE**  
5 **COMMISSION. IS THERE A NEED TO SEPARATELY IDENTIFY THE**  
6 **REVENUE RECEIVED FROM EACH COST COMPONENT SEPARATELY?**

7 A. No. PEC will compare the rate revenue against the actual booked program costs, and  
8 corresponding incentives and net lost revenue, to assess any revenues that would need to be  
9 trued-up in a future DSM/EE Experience Modification Factor. The cost impact of the  
10 incentives and net lost revenue will be based upon the initial assumptions approved with  
11 the program until such time that measurements and validation (M&V) is completed. After  
12 completion of M&V, any future incentives and net lost revenues will be based upon the  
13 findings of the M&V analysis and therefore any necessary true-up will be the direct result of  
14 program participation.

15 **Q. HOW IS THE RATE FOR THE DSM/EE EXPERIENCE MODIFICATION**  
16 **FACTOR IN THIS PROCEEDING ESTABLISHED?**

17 A. As discussed above, any costs to be recovered in the EMF are first allocated to NC Retail.  
18 These costs are then compared to DSM revenues during the period with the difference  
19 being used to create an EMF revenue requirement. In the future, the revenue to be  
20 recovered or refunded in the EMF should be relatively small, therefore, PEC recommends  
21 that these costs not be separated into DSM or EE related categories, but be combined and  
22 allocated to rate classes using an energy allocation. PEC proposes to depart from this  
23 approach in this proceeding because DSM/EE costs are not currently being recovered in

1 rates. PEC recommends the same approach be used as used for DSM/EE cost of allocation  
 2 EE related costs using an energy allocation and DSM related costs using a demand  
 3 allocation. The allocation percentages are identical to that proposed for DSM/EE costs.  
 4 Evans Exhibit No. 8 provides the Energy Efficiency Experience Modification Factor Rate  
 5 derivation. Evans Exhibit No. 9 provides the DSM/EE Experience Modification Factor  
 6 Rate derivation.

7 **Q. WHAT RATES ARE PROPOSED FOR EACH RATE CLASS?**

8 A. Evans Exhibit No. 10 calculates the DSM/EE annual rate and EMF proposed in this  
 9 proceeding. The DSM/EE rates recover costs forecasted to be incurred during December  
 10 2008 through November 2009. The DSM/EE EMF recovers costs incurred from August  
 11 21, 2007 through March 31, 2008 plus costs incurred during the period April 1, 2008  
 12 through July 31, 2008. Projected costs during this period will be trued-up prior to the  
 13 September hearing. PEC proposes the following rates, exclusive of gross receipts taxes, for  
 14 each rate class (shown in cents per kWh):

Rate Class	DSM/EE Rate	DSM/EE EMF	DSM/EE Annual Rider
Residential	0.165	0.025	0.190
Small General Service	0.167	0.025	0.192
Medium General Service	0.140	0.021	0.161
Large General Service	0.101	0.016	0.117
Lighting	0.037	0.007	0.044

15 **Q. HOW WILL PEC'S TARIFFS BE REVISED TO RECOVER THESE RATES?**

1 A. Evans Exhibit No. 11 provides Annual Billing Adjustment Rider BA-1 that describes the  
2 rates proposed to be recovered in this proceeding. PEC proposes that these rates be  
3 included in the energy rates of each schedule to make it easier for customers to use a single  
4 tariff to calculate and verify their monthly bill. Since all customers would then be billed  
5 these rates, customers electing to “opt-out” of the annual DSM/EE Rider will receive a  
6 Monthly Credit on their bill. PEC believes that this will easily identify the bill impact if  
7 they elect to “opt-in to DSM/EE in the future. It also clearly identifies those customers that  
8 elect to “opt-out” so they can ensure they are being accurately billed to reflect their  
9 election. Customers will be required to notify PEC of their election to “opt-out” in writing.  
10 A communications plan is currently being developed for implementation late this summer  
11 to notify customers of their ability to “opt-out”. This should allow ample time to  
12 implement the customer’s decision prior to the rate going into effect on December 1.

13 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

14 A. Yes.

263695

# North Carolina Retail - DSM/EE Revenue Requirements Summary

Test Period	O&M (1)	Other O&M (2)	Taxes (3)	Depreciation (4)	Cost of Capital (5)	Carrying Cost (6)	A&G Expense (7)	Σ Cost (1) thru (7)	Lost Revenue (8)	Utility Incentive (10)	Total Incentive (11)	Totals With Incentive (12)
<b>NC DSM Program Expenses</b>												
1	439,230	-	(323)	-	(837)	-	438,070	-	-	-	-	438,070
2	175,918	-	-	-	-	-	175,918	-	-	-	-	175,918
3	615,148	-	(323)	-	(637)	-	613,988	-	-	-	-	613,988
4	DSM Assigned A&G and CCost	-	-	-	-	53,487	1,455,778	1,509,265	-	-	-	1,509,265
5	Total DSM and Assigned A&G	-	(323)	-	(837)	53,487	1,455,778	2,123,253	-	-	-	2,123,253
<b>NC EE Program Expenses</b>												
6	28,041	-	-	-	-	-	28,041	-	-	-	-	28,041
7	Res New Construction	-	-	-	-	-	-	-	-	-	-	-
8	CIG Retrofit	-	-	-	-	-	-	-	-	-	-	-
9	CFL	-	-	-	-	-	-	-	-	-	-	-
10	Total EE	-	-	-	-	-	28,041	-	-	-	-	28,041
11	EE Assigned A&G and CCost	-	-	-	-	25,867	654,045	679,913	105,420	67,762	173,182	442,079
12	Total EE and Assigned A&G	-	-	-	-	25,867	654,045	679,913	105,420	67,762	173,182	442,079
13	Test Period Total	-	(323)	-	(837)	79,354	2,109,823	3,100,103	105,420	67,762	173,182	3,273,285

Prospective Period	O&M (1)	Other O&M (2)	Taxes (3)	Depreciation (4)	Cost of Capital (5)	Carrying Cost (6)	A&G Expense (7)	Σ Cost (1) thru (7)	Lost Revenue (8)	Utility Incentive (10)	Total Incentive (11)	Totals With Incentive (12)
<b>NC DSM Program Expenses</b>												
1	483,163	223	17,727	13,702	40,483	-	555,299	-	-	-	-	555,299
2	287,928	-	-	-	-	-	287,928	-	-	-	-	287,928
3	771,081	223	17,727	13,702	40,483	-	843,227	-	-	-	-	843,227
4	DSM Assigned A&G and CCost	-	-	-	-	508,230	993,126	1,501,356	-	-	-	1,501,356
5	Total DSM and Assigned A&G	223	17,727	13,702	40,483	508,230	1,836,352	1,836,352	-	-	-	1,836,352
<b>NC EE Program Expenses</b>												
6	42,327	-	-	-	-	-	42,327	-	-	-	-	42,327
7	Res New Construction	-	-	-	-	-	-	-	-	-	-	-
8	CIG New Construction	-	-	-	-	-	-	-	-	-	-	-
9	CFL	-	-	-	-	-	-	-	-	-	-	-
10	Total EE	-	-	-	-	-	42,327	-	-	-	-	42,327
11	EE Assigned A&G and CCost	-	-	-	-	82,073	1,178,605	1,260,678	106,772	68,631	175,402	985,276
12	Total EE and Assigned A&G	-	-	-	-	82,073	1,178,605	1,260,678	106,772	68,631	175,402	985,276
13	Prospective Period Total	223	17,727	13,702	40,483	590,263	2,017,030	2,017,030	213,444	137,031	350,433	1,666,597

Rate Period	O&M (1)	Other O&M (2)	Taxes (3)	Depreciation (4)	Cost of Capital (5)	Carrying Cost (6)	A&G Expense (7)	Σ Cost (1) thru (7)	Lost Revenue (8)	Utility Incentive (10)	Total Incentive (11)	Totals With Incentive (12)
<b>NC DSM Program Expenses</b>												
1	4,486,500	15,374	1,247,956	1,001,972	2,857,875	-	9,600,677	-	63,753	553,963	617,716	10,227,393
2	9,048,241	-	-	-	-	-	9,048,241	-	11,759	4,717,668	4,729,427	13,777,668
3	13,534,741	15,374	1,247,956	1,001,972	2,857,875	-	16,657,917	-	75,512	5,271,631	5,347,143	24,005,060
4	DSM Assigned A&G and CCost	-	-	-	-	1,511,130	2,623,346	4,134,476	-	-	-	4,134,476
5	Total DSM and Assigned A&G	15,374	1,247,956	1,001,972	2,857,875	1,511,130	2,623,346	22,792,393	75,512	5,271,631	5,347,143	28,139,536
<b>NC EE Program Expenses</b>												
6	1,292,153	-	-	-	-	-	1,292,153	-	167,331	230,693	398,024	1,690,177
7	Res New Construction	-	-	-	-	-	-	-	63,511	48,817	112,328	899,761
8	CIG New Construction	-	-	-	-	-	-	-	204,714	105,220	309,934	3,896,342
9	CFL	-	-	-	-	-	-	-	319,981	205,893	525,874	525,874
10	Total EE	-	-	-	-	-	1,292,153	-	755,537	590,623	1,346,160	7,082,153
11	EE Assigned A&G and CCost	-	-	-	-	464,566	1,178,605	1,643,171	755,537	590,623	1,346,160	1,643,171
12	Total EE and Assigned A&G	-	-	-	-	464,566	1,178,605	1,643,171	755,537	590,623	1,346,160	1,643,171
13	Rate Period Total	15,374	1,247,956	1,001,972	2,857,875	1,975,696	3,801,951	30,171,557	831,049	5,862,254	6,693,303	36,864,860



ILLUSTRATIVE EXAMPLES OF UTILITY INCENTIVE CALCULATIONS

**A. ABC DSM Program**

Utility Incentives - DSM Programs

- 1 PEC Discount Rate 8.3%
- 2 Utility Cost \$ 200,000
- 3 Percent of Savings Incentive 50%
- 4 Target Utility Incentive (NPV) 100,000
- 5 Incentive Rates (\$/KW-yr) 3.12

Calculated DSM Program Incentive Rate Per KW Saved

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sample	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
Line 5	\$ 3.12	\$ 3.12	\$ 3.12	\$ 3.12	\$ 3.12	\$ 3.12	\$ 3.12	\$ 3.12	\$ 3.12	\$ 3.12
Lines 7 x 8 x 1000	\$ 3,115	\$ 6,230	\$ 9,345	\$ 12,460	\$ 15,575	\$ 18,690	\$ 21,805	\$ 24,920	\$ 28,035	\$ 31,150

Present Values of these amounts = Target Incentive

- 10 NPV of Annual Incentive \$100,000
- CHK \$0

**B. DEF EE Program**

Utility Incentives - EE Programs

- 1 PEC Discount Rate 8.3%
- 2 Utility Cost \$ 200,000
- 3 Percent of Savings Incentive 50%
- 4 Target Utility Incentive (NPV) 100,000
- 5 Incentive Rates (\$/MW-yr) 311.50

Calculated EE Program Incentive Rate Per MWh Saved

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sample	10.0	20.0	30.0	40.0	50.0	60.0	70.0	80.0	90.0	100.0
Line 5	\$ 311.50	\$ 311.50	\$ 311.50	\$ 311.50	\$ 311.50	\$ 311.50	\$ 311.50	\$ 311.50	\$ 311.50	\$ 311.50
Lines 7 x 8	\$ 3,115	\$ 6,230	\$ 9,345	\$ 12,460	\$ 15,575	\$ 18,690	\$ 21,805	\$ 24,920	\$ 28,035	\$ 31,150

Present Values of these amounts = Target Incentive

- 10 NPV of Annual Incentive \$100,000
- CHK \$0

**C. DEF EE Program**

Utility Incentives - Lost Revenue

- 1 Gross Margin (Net of GRT) 59.68
- 2 Less: Incremental Variable O&M 2.13
- 3 Net Rate for Lost Revenue Determination / MWh 57.55
- 4 Program Based Lost Sales (MWh) 30.0
- 5 Net Lost Revenue 1,726.5

Source	2009	2008	2009
Residential	\$ 59.68	\$ 59.68	\$ 59.68
From CSP 288	2.07	2.13	2.13
Lines 1-2	\$ 57.61	\$ 57.55	\$ 57.55
Sample	10.0	20.0	30.0
Lines 3 x 4	576.1	1,151.0	1,726.5

Calculated Net Lost Revenues

**PROGRESS ENERGY CAROLINAS, INC.**  
**Annual Sales for NC Customers Eligible for DSM/EE Opt-Out**  
**Annual Sales for the Year Ended March 31, 2008**

<u>Rate Class</u>	<u>Commercial</u>	<u>Industrial*</u>	<u>Total</u>
RES	0	0	0
SGS	8,027,300	17,009,689	25,036,989
MGS	3,823,495,393	2,334,296,625	6,157,792,018
LGS	1,133,541,491	8,007,538,528	9,141,080,019
Lighting	0	14,835,590	14,835,590
<b>Total Opt-Out Sales</b>	<b>4,965,064,184</b>	<b>10,373,680,432</b>	<b>15,338,744,616</b>

\* Industrial category also includes Revenue Class 45, Public Authority

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**PROGRESS ENERGY CAROLINAS, INC.**

**Energy Allocation Factors - Applicable to EE Program Costs**

**North Carolina Rate Class Energy Allocation Factors**

<b>Rate Class</b>	<b>Total NC Rate Class Sales (MWhrs) <sup>(1)</sup></b> <small>(1)</small>	<b>Opt-Out Sales<sup>(2)</sup></b> <small>(2)</small>	<b>Adjusted NC Rate Class MWhr Sales</b> <small>(3) = (1) - (2)</small>	<b>Rate Class Energy Allocation Factor</b> <small>(4) = (3) / NC Total in Column 3</small>
Residential	15,496,950	0	15,496,950	66.02%
Small General Service	1,985,374	25,037	1,960,337	8.35%
Medium General Service	11,734,023	6,157,792	5,576,231	23.76%
Large General Service	9,076,284	9,076,284 <sup>(3)</sup>	0	0.00%
Lighting	453,441	14,836	438,606	1.87%
<b>NC Retail</b>	<b>38,746,072</b>	<b>15,273,949</b>	<b>23,472,123</b>	<b>100.00%</b>

**NOTES:**

(1) Total NC Rate Class Sales (MWhrs) are for the forecasted year ended November 2009.

(2) Opt-Out sales for the year ended March 31, 2008 are provided in Evans Exhibit No. 3

(3) LGS Opt-Out sales were set to match the forecast sales since all customers in the LGS class are eligible to opt-out.

**PROGRESS ENERGY CAROLINAS, INC.**  
**Demand Allocation Factors - Applicable to DSM Programs**

**North Carolina Rate Class Demand Allocation Factors**

Rate Class	Total NC Rate Class Sales <sup>(1)</sup> (1)	Sales Subject to Opt-Out <sup>(2)</sup> (2)	Rate Class Demand <sup>(3)</sup> (3)	Revised Rate Class Demand (4) = ((1 - 2) / 1) * 3	Rate Class Allocation Factor (5) = (4)/Total of Column 4
Residential	15,496,950	0	4,019,614	4,019,614	70.57809%
Small General Service	1,985,374	25,037	522,994	516,398	9.06714%
Medium General Service	11,734,023	6,157,792	2,439,422	1,159,260	20.35477%
Large General Service	9,076,284	9,076,284 <sup>(4)</sup>	1,168,621	0	0.00000%
Lighting	453,441	14,836	0	0	0.00000%
NC Retail	38,746,072	15,273,949	8,150,651	5,695,273	100.00000%

**NOTES:**

- (1) Total NC Rate Class Sales (MWHrs) are for the forecasted year ended November 2009.
- (2) Opt-Out sales for the year ended March 31, 2008 are provided in Evans Exhibit No. 3
- (3) The CP demands are from the annual NC Cost of Service Study for August 9, 2007 during the hour ended at 4 p.m.
- (4) LGS Opt-Out sales were set to match the forecast sales since all customers in the LGS class are eligible to opt-out.

PROGRESS ENERGY CAROLINAS, INC.  
Energy Efficiency Rate Derivation

NC Rate Class	Adjusted NC Rate Class kWh Sales <sup>(1)</sup>	Rate Class Energy Allocation Factor <sup>(2)</sup>	EE Revenue Requirement			EE Rate (\$/kWh)	
			EE Program Costs <sup>(3)</sup>	EE Utility Incentive and Net Lost Revenue Costs <sup>(4)</sup>	EE Program Rate <sup>(5) = (3) / (1)</sup>	EE Utility Incentive and Net Lost Revenue Rate <sup>(6) = (4) / (1)</sup>	Total EE Rate <sup>(7) = (5) + (6)</sup>
Residential	15,496,949,876	66.02%	\$4,871,930	\$888,772	\$0.00031	\$0.00006	\$0.00037
Small General Service	1,960,336,986	8.35%	\$616,291	\$112,428	\$0.00031	\$0.00006	\$0.00037
Medium General Service	5,576,230,957	23.76%	\$1,753,055	\$319,805	\$0.00031	\$0.00006	\$0.00037
Large General Service <sup>(5)</sup>	0	0.00%	\$0	\$0	\$0.00031	\$0.00006	\$0.00037
Lighting	438,605,662	1.87%	\$137,889	\$25,155	\$0.00031	\$0.00006	\$0.00037
NC Retail	23,472,123,482	100%	\$7,379,164	\$1,346,160	\$0.00031	\$0.00006	\$0.00037

NOTES:

- (1) Rate Class Sales, excluding "Opt-Out" sales, are derived in Evans Exhibit No. 4, column (3).
- (2) Rate Class Energy Allocation Factor is derived in Evans Exhibit No. 4
- (3) The Total EE and Assigned A&G Revenue Requirement is derived in Evans Exhibit No. 1, column (8).
- (4) The Total EE and Assigned A&G Revenue Requirement is derived in Evans Exhibit No. 1, column (11).
- (5) A rate is shown for the LGS Class, even though all customers are assumed to opt-out, based upon the class load requirement.

**PROGRESS ENERGY CAROLINAS, INC.**  
**Demand Side Management Rate Derivation**

NC Rate Class	Adjusted NC Rate Class kWhr Sales <sup>(1)</sup>	Rate Class Demand Allocation Factor <sup>(2)</sup>	DSM Revenue Requirement		DSM Rate (\$/kWh)		
			DSM Program Costs <sup>(3)</sup>	Incentive and Net Lost Revenue Costs <sup>(4)</sup>	DSM Program Rate <sup>(5) = (3) / (1)</sup>	DSM Utility Incentive and Net Lost Revenue Rate <sup>(6) = (4) / (1)</sup>	Total DSM Rate <sup>(7) = (5) + (6)</sup>
Residential	15,496,949,876	70.58%	\$16,086,436	\$3,773,911	\$0.00104	\$0.00024	\$0.00128
Small General Service	1,960,336,986	9.07%	\$2,066,618	\$484,833	\$0.00105	\$0.00025	\$0.00130
Medium General Service	5,576,230,957	20.35%	\$4,639,340	\$1,088,399	\$0.00083	\$0.00020	\$0.00103
Large General Service <sup>(6)</sup>	0	0.00%	\$0	\$0	\$0.00052	\$0.00012	\$0.00064
Lighting	438,605,662	0.00%	\$0	\$0	\$0.00000	\$0.00000	\$0.00000
NC Retail	23,472,123,482	100.00%	\$22,792,393	\$5,347,143	\$0.00097	\$0.00023	\$0.00120

**NOTES:**

- (1) Rate Class Sales, excluding "Opt-Out" sales, are derived in Evans Exhibit No. 4, column (3).
- (2) Rate Class Demand Allocation Factor is derived in Evans Exhibit No. 5.
- (3) The Total EE and Assigned A&G Revenue Requirement is derived in Evans Exhibit No. 1, column (8).
- (4) The Total EE and Assigned A&G Revenue Requirement is derived in Evans Exhibit No. 1, column (11).
- (5) A rate is shown for the LGS Class, even though all customers are assumed to opt-out, based upon the class load requirement.

**PROGRESS ENERGY CAROLINAS, INC.**  
**Energy Efficiency Experience Modification Factor Rate Derivation**

NC Rate Class	Adjusted NC Rate Class kWh Sales <sup>(1)</sup>	Rate Class Energy Allocation Factor <sup>(2)</sup>	EE EMF Revenue Requirement		EE EMF Rate (\$/kWh)		
			EE EMF Program Costs <sup>(3)</sup>	EE EMF Utility Incentive and Net Lost Revenue Costs <sup>(4)</sup>	EE EMF Program Rate <sup>(5) = (3) / (1)</sup>	EE EMF Utility Incentive and Net Lost Revenue Rate <sup>(6) = (4) / (1)</sup>	Total EE EMF Rate <sup>(7) = (5) + (6)</sup>
Residential	15,496,949,876	66.02%	\$944,115	\$230,145	\$0.00006	\$0.00001	\$0.00007
Small General Service	1,960,336,986	8.35%	\$119,429	\$29,113	\$0.00006	\$0.00001	\$0.00007
Medium General Service	5,576,230,957	23.76%	\$339,719	\$82,813	\$0.00006	\$0.00001	\$0.00007
Large General Service <sup>(5)</sup>	0	0.00%	\$0.00	\$0.00	\$0.00006	\$0.00001	\$0.00007
Lighting	438,605,662	1.87%	\$26,721	\$6,514	\$0.00006	\$0.00001	\$0.00007
NC Retail	23,472,123,482	100.00%	\$1,429,984	\$348,585	\$0.00006	\$0.00001	\$0.00007

**NOTES:**

- (1) Rate Class Sales, excluding "Opt-Out" sales, are derived in Evans Exhibit No. 4, column (3).
- (2) Rate Class Energy Allocation Factor is derived in Evans Exhibit No. 4.
- (3) The Total EE and Assigned A&G Revenue Requirement is derived in Evans Exhibit No. 1, column (8) for the historic test year August 21, 2007 to March 31, 2008 and the forecast period April 2008 through July 2008. The forecast period will be updated to reflect actual costs prior to the September hearing.
- (4) The Total EE and Assigned A&G Revenue Requirement is derived in Evans Exhibit No. 1, column (11) for the historic test year August 21, 2007 to March 31, 2008 and the forecast period April 2008 through July 2008. The forecast period will be updated to reflect actual costs prior to the September hearing.
- (5) A rate is shown for the LGS Class, even though all customers are assumed to opt-out, based upon the class load requirement.

PROGRESS ENERGY CAROLINAS, INC.

Demand Side Management Experience Modification Factor Rate Derivation

NC Rate Class	Adjusted NC Rate Class kWh-Ir Sales <sup>(1)</sup>	Rate Class Demand Allocation Factor <sup>(2)</sup>	DSM EMF Revenue Requirement			DSM EMF Rate (\$/kWh)		
			DSM EMF Program Costs <sup>(3)</sup>	DSM EMF Utility Incentive and Net Lost Revenue Costs <sup>(4)</sup>	DSM EMF Program Rate <sup>(5) = (3) / (1)</sup>	DSM EMF Utility Incentive and Net Lost Revenue Rate <sup>(6) = (4) / (1)</sup>	Total DSM EMF Rate <sup>(7) = (5) + (6)</sup>	
Residential	15,496,949,876	70.58%	\$2,794,614	\$0	\$0.00018	\$0.00000	\$0.00018	
Small General Service	1,960,336,986	9.07%	\$359,023	\$0	\$0.00018	\$0.00000	\$0.00018	
Medium General Service	5,576,230,957	20.35%	\$805,969	\$0	\$0.00014	\$0.00000	\$0.00014	
Large General Service <sup>(5)</sup>	0	0.00%	\$0	\$0	\$0.00009	\$0.00000	\$0.00009	
Lighting	438,605,662	0.00%	\$0	\$0	\$0.00000	\$0.00000	\$0.00000	
NC Retail	23,472,123,482	100%	\$3,959,605	\$0	\$0.00017	\$0.00000	\$0.00017	

NOTES:

- (1) Rate Class Sales, excluding "Opt-Out" sales, are derived in Evans Exhibit No. 4, column (3).
- (2) Rate Class Demand Allocation Factor is derived in Evans Exhibit No. 5.
- (3) The Total EE and Assigned A&G Revenue Requirement is derived in Evans Exhibit No. 1, column (8) for the historic test year August 21, 2007 to March 31, 2008 and the forecast period April 2008 through July 2008. The forecast period will be updated to reflect actual costs prior to the September hearing.
- (4) The Total EE and Assigned A&G Revenue Requirement is derived in Evans Exhibit No. 1, column (11) for the historic test year August 21, 2007 to March 31, 2008 and the forecast period April 2008 through July 2008. The forecast period will be updated to reflect actual costs prior to the September hearing.
- (5) A rate is shown for the LGS Class, even though all customers are assumed to opt-out, based upon the class load requirement.



PROGRESS ENERGY CAROLINAS, INC.

EE/DSM Billing Rate - December 2008 through November 2009

All rates are shown in dollars per kWh

<u>NC Rate Class</u>	<u>Total EE Rate</u> (1)	<u>Total DSM Rate</u> (2)	<u>Total EE EMF Rate</u> (3)	<u>Total DSM EMF Rate</u> (4)	<u>DSM/EE Billing Rate</u> (5)
Residential	\$0.00037	\$0.00128	\$0.00007	\$0.00018	\$0.00190
Small General Service	\$0.00037	\$0.00130	\$0.00007	\$0.00018	\$0.00192
Medium General Service	\$0.00037	\$0.00103	\$0.00007	\$0.00014	\$0.00161
Large General Service	\$0.00037	\$0.00064	\$0.00007	\$0.00009	\$0.00117
<u>Lighting</u>	<u>\$0.00037</u>	<u>\$0.00000</u>	<u>\$0.00007</u>	<u>\$0.00000</u>	<u>\$0.00044</u>
NC Retail	\$0.00037	\$0.00120	\$0.00007	\$0.00017	\$0.00181

**NOTES:**

- (1) Total EE Rate is derived in Evans Exhibit No. 6, column (7).
- (2) Total DSM Rate is derived in Evans Exhibit No. 7, column (7).
- (3) Total EE EMF Rate is derived in Evans Exhibit No. 8, column (7).
- (4) Total DSM EMF Rate is derived in Evans Exhibit No. 9, column (7).
- (5) DSM/EE Billing Rate does not include gross receipts taxes.

Carolina Power & Light Company  
d/b/a Progress Energy Carolinas, Inc.  
(North Carolina Only)

ANNUAL BILLING ADJUSTMENTS  
RIDER BA-1

APPLICABILITY – RATES INCLUDED IN TARIFF CHARGES

The rates shown below are included in the MONTHLY RATE provision in each schedule identified in the table below:

Billing Adjustment Factors (¢/kWh)*					
Rate Class	Fuel Adjustment		DSM/EE Adjustment		Net Adjustment
	Rate <sup>(1)</sup>	EMF <sup>(2)</sup>	Rate <sup>(3)</sup>	EMF <sup>(4)</sup>	
Residential			0.170	0.026	
Applicable to Schedules: RES, R-TOUD & R-TOUE					
Small General Service			0.173	0.026	
Applicable to Schedules: SGS & TSS					
Medium General Service			0.145	0.022	
Applicable to Schedules: MGS, SGS-TOU, SI, CH-TOUE, GS-TES, APH-TES, CSG, CSE & Riders 66 & SS (less than 1 MW)					
Large General Service			0.104	0.017	
Applicable to Schedules: LGS, LGS-TOU, LGS-RTP and Riders 66 & SS (1 MW and greater)					
Lighting			0.038	0.007	
Applicable to Schedules: ALS, SLS, SLR & SFLS					

\* Billing Adjustment Factors, shown above, include North Carolina gross receipts taxes.

Billing Adjustment Factors Description:

- (1) The Fuel Adjustment Rate is adjusted annually to reflect incremental changes in the costs of fuel and fuel-related costs from the rates approved in the last general rate case.
- (2) The Fuel Adjustment Experience Modification Factor (EMF) is adjusted annually to reflect the difference between reasonable and prudently incurred fuel and fuel-related costs and the fuel and fuel-related revenues realized during a test period under review and shall remain in effect for a fixed 12 month period.
- (3) The Demand Side Management/Energy Efficiency (DSM/EE) Rate is adjusted annually to reflect the costs and incentives associated with demand side management and energy efficiency measures and programs approved by the North Carolina Utilities Commission.
- (4) The Demand Side Management/Energy Efficiency Experience Modification Factor (DSM/EE EMF) is adjusted annually to reflect the difference between reasonable and prudently incurred DSM/EE costs and incentives and DSM/EE revenues realized during the period under review and shall remain in effect for a fixed 12 month period.

Demand Side Management/Energy Efficiency “Opt-Out” Option

North Carolina Utilities Commission Rule R8-69(e) allows commercial customers with annual consumption of 1,000,000 kWh or greater in the billing months of the prior calendar year and all industrial customers to elect to not participate in any utility-offered DSM/EE program and, after written notification to the utility, not be subject to the DSM/EE Rate and EMF, shown above. For purposes of application of this option, a customer is defined to be a metered account billed under a single application of a Company rate tariff. Since these rates are included in the rate tariff charges, Customers electing this option shall receive the following DSM/EE Credit on their monthly bill statement:

$$\text{DSM/EE Credit} = \text{DSM/EE Rate Credit} + \text{DSM/EE EMF Credit}$$

Where:

$$\begin{aligned} \text{DSM/EE Rate Credit} &= \text{Billed kWh times DSM/EE Rate*} \\ \text{DSM/EE EMF Credit} &= \text{Billed kWh times DSM/EE EMF Rate*} \end{aligned}$$

\* The DSM/EE Rate and EMF shall be as shown in the above table for the schedule applicable to Customer’s monthly bill.

Following the December bill each year, usage for commercial accounts electing to “opt-out” of the DSM/EE rates shall be reviewed and the customer shall be notified and removed from the “opt-out” option if annual consumption is less than 1,000,000 kWh in the prior twelve months.

APPLICABILITY – RATES NOT INCLUDED IN TARIFF CHARGES

The rates shown below are not included in the MONTHLY RATE provision of the applicable schedule used in billing and shall therefore be added to Customer’s monthly bill statement:

Billing Adjustment Factors Per Customer (\$/month)*			
Revenue Class	REPS Rate <sup>(5)</sup>	REPS EMF <sup>(6)</sup>	Net Billing Rate
Residential	\$per month	\$per month	\$per month
Commercial/Public Streets and Highways	\$per month	\$per month	\$per month
Industrial/Public Authority	\$per month	\$per month	\$per month

\* Billing Adjustment Factors, shown above, include North Carolina gross receipts taxes.

For purposes of the applicability of the REPS-related Billing Adjustment Factors, a “Customer” is defined as all accounts (metered and unmetered) serving the same customer of the same revenue classification located on the same or contiguous properties. Upon written notification from Customer, accounts meeting these criteria shall be combined under a single account number to allow Customer to receive only one monthly bill statement for all meters under the account and only one monthly REPS charge.

Billing Adjustment Factors Description:

- (5) The Renewable Energy Portfolio Standard (REPS) Rate is adjusted annually to reflect research and development costs and incremental costs incurred to comply with the state’s Renewable Energy and Energy Efficiency Portfolio Standard (REPS).
- (6) The Renewable Energy Portfolio Standard Experience Modification Factor (REPS EMF) Rate is adjusted annually to recover the difference between reasonable and prudently incurred REPS costs and REPS revenues realized during the period under review and shall remain in effect for a fixed 12 month period.

SALES TAX

To the above charges will be added any applicable North Carolina Sales Tax.

Effective for service rendered on and after December 1, 2008;  
The DSM/EE EMF, Fuel Adjustment EMF and REPS EMF are effective for service rendered through  
November 30, 2009  
NCUC Docket No. E-2, Subs 929, 930 & 931