

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 1073

In the Matter of	)	
Application of Duke Energy Carolinas, LLC	)	<b>DIRECT TESTIMONY OF</b>
for Approval of Demand-Side Management	)	<b>CAROLYN T. MILLER</b>
and Energy Efficiency Cost Recovery Rider	)	<b>FOR</b>
Pursuant to N.C. Gen. Stat. § 62-133.9 and	)	<b>DUKE ENERGY CAROLINAS,</b>
Commission Rule R8-69	)	<b>LLC</b>

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1   **Q.     PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2   A.     My name is Carolyn T. Miller, and my business address is 550 South Tryon  
3           Street, Charlotte, North Carolina.

4   **Q.     BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5   A.     I am a Rates Manager for Duke Energy Carolinas, LLC (“Duke Energy  
6           Carolinas,” “DEC,” or the “Company”).

7   **Q.     PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL  
8           QUALIFICATIONS.**

9   A.     I graduated from the College of New Jersey in Trenton, New Jersey with a  
10          Bachelor of Science in Accountancy. I am a certified public accountant  
11          licensed in the State of North Carolina. I began my career in 1994 with Ernst  
12          & Young as a staff auditor. In 1997, I began working with Duke Energy (now  
13          known as Duke Energy Carolinas) as a senior business analyst and have held a  
14          variety of positions in the finance organization. I joined the Rates Department  
15          in 2014 as Manager, Rates and Regulatory Strategy.

16  **Q.     WHAT ARE YOUR PRESENT RESPONSIBILITIES AT DUKE  
17          ENERGY CAROLINAS?**

18  A.     I am responsible for providing regulatory support and guidance on DEC’s  
19          energy efficiency cost recovery process. This includes, but is not limited to,  
20          calculating system allocations, determining the earnings cap for save-a-watt  
21          vintages, and determining final customer rates.

22  **Q.     HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS  
23          COMMISSION?**

1 A. No.

2 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**  
3 **PROCEEDING?**

4 A. My testimony supports DEC's Application for approval of its Demand-Side  
5 Management ("DSM")/Energy Efficiency ("EE") Rider, Rider EE, for 2016  
6 ("Rider 7"). Rider 7 includes components relating to both DEC's save-a-watt  
7 pilot approved in Docket No. E-7, Sub 831,<sup>1</sup> as well as the new cost recovery  
8 mechanism and portfolio of programs approved by the Commission in Docket  
9 No. E-7, Sub 1032. The prospective components of Rider 7 include (1) an  
10 estimate of the third year of net lost revenues for Vintage 2014 of DEC's EE  
11 programs under the new mechanism; (2) an estimate of the second year of net  
12 lost revenues for Vintage 2015 of DEC's EE programs under the new  
13 mechanism; and (3) estimates of the program costs, incentive and net lost  
14 revenues for Vintage 2016 EE and DSM programs under the new mechanism.

15 The Rider 7 Experience Modification Factor ("EMF") includes the  
16 final save-a-watt true-up for Vintages 1-4. This includes final evaluation,  
17 measurement and verification ("EM&V") results for all vintages, an updated  
18 estimate of total revenue collections through 2015, and expected net lost  
19 revenue collections for 2016. The Rider 7 EMF also includes the true-up of  
20 the first year of program costs, incentive and net lost revenues for Vintage  
21 2014 of DEC's EE and DSM programs under the new mechanism. In my

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<sup>1</sup> The save-a-watt pilot, which included DEC's initial portfolio of EE/DSM programs and modified save-a-watt cost recovery mechanism, expired December 31, 2013. However, because net lost revenue recovery and true-ups of prior vintages extend beyond the expiration of the pilot, components relating to the save-a-watt pilot are included in Rider 7. The save-a-watt pilot also provides for a final true-up upon completion of the four-year term which is also included in Rider 7.

1 testimony, I discuss the key concepts and attributes of Rider 7, as well as the  
2 mechanics and calculations that are incorporated within Rider 7.

3 **Q. PLEASE DESCRIBE THE EXHIBITS ATTACHED TO YOUR**  
4 **TESTIMONY.**

5 A. Miller Exhibit 1 summarizes the individual rider components for which DEC  
6 requests approval in this filing. Miller Exhibit 2 shows calculations of rates  
7 for each vintage, with separate calculations for non-residential EE and DSM  
8 programs within each vintage. Miller Exhibit 3 shows the actual and  
9 prospective amounts collected from customers via Riders 1-6 related to  
10 Vintages 1, 2, 3, and 4, the save-a-watt vintages for which a true-up  
11 calculation is performed in this filing, as well as Vintages 2014 and 2015.  
12 Miller Exhibit 4 presents the calculation of the earnings cap for the save-a-  
13 watt pilot program. Miller Exhibit 5 provides the calculation of the allocation  
14 factors used to allocate system EE and DSM costs to DEC's North Carolina  
15 retail jurisdiction. Miller Exhibit 6 presents the forecasted sales for the rate  
16 period (2016), updated forecasted sales for 2015, and the estimated sales  
17 related to customers that have opted out of various vintages. These amounts  
18 are used to determine the forecasted sales to which the Rider 7 amounts will  
19 apply, and to update the projected amounts to be collected in Rider 6. Miller  
20 Exhibit 7 is the proposed tariff sheet for Rider 7.

21 **Q. WERE MILLER EXHIBITS 1-7 PREPARED BY YOU OR AT YOUR**  
22 **DIRECTION AND SUPERVISION?**

23 A. Yes.

1                   **I.       OVERVIEW OF RECOVERY MECHANISMS**

2                               **A.       SAVE-A-WATT PILOT**

3   **Q.       PLEASE PROVIDE AN OVERVIEW OF COST RECOVERY UNDER**  
4   **THE MODIFIED SAVE-A-WATT COMPENSATION MECHANISM.**

5   A.       The modified save-a-watt compensation mechanism is described in the  
6            Agreement and Joint Stipulation of Settlement between DEC, the Public Staff  
7            - North Carolinas Utilities Commission (“Public Staff”), Southern Alliance for  
8            Clean Energy (“SACE”), Environmental Defense Fund (“EDF”), Natural  
9            Resources Defense Council (“NRDC”), and the Southern Environmental Law  
10           Center, which was filed on June 12, 2009 in Docket No. E-7, Sub 831 (“Save-  
11           a-Watt Settlement”), and approved in the Commission’s *Order Approving*  
12           *Agreement and Joint Stipulation of Settlement Subject to Certain Commission-*  
13           *Required Modifications and Decisions on Contested Issues* issued on February  
14           9, 2010 (“Save-a-Watt Order”). The modified save-a-watt compensation  
15           mechanism is designed to allow DEC to collect a level of revenue equal to  
16           75% of its estimated avoided capacity costs applicable to DSM programs,  
17           50% of the net present value of estimated avoided capacity and energy costs  
18           applicable to EE programs, and to recover net lost revenues for EE programs  
19           only. Revenues collected under save-a-watt are based on the expected  
20           avoided costs and the associated net lost revenues to be realized at an 85%  
21           level of achievement of DEC’s avoided cost savings target for the applicable  
22           vintage per the Save-a-Watt Settlement. The 85% billing factor was used

1 until an initial true-up was performed at the end of the four-year pilot as  
2 calculated in Rider 6.

3 The Company calculates billing factors for Rider EE for residential  
4 and non-residential customers. The Company calculates the residential charge  
5 based on the avoided costs of programs targeted to residential customers, and  
6 the non-residential charge based on the avoided costs of programs targeted to  
7 non-residential customers.

8 The modified save-a-watt compensation mechanism employs a vintage  
9 year concept, and there were four calendar year vintages<sup>2</sup> during the limited  
10 term of the modified save-a-watt pilot. Recovery under save-a-watt includes  
11 annual net lost revenues associated with each vintage of EE programs for a  
12 36-month period. Therefore, the recovery of net lost revenues applicable to  
13 EE programs for certain vintage years extends several years beyond the initial  
14 four-year cost recovery period.

15 The Save-a-Watt Settlement provides for a series of vintage true-ups  
16 that are conducted to update revenue requirements, including net lost  
17 revenues, based on actual customer participation results for each vintage.  
18 EM&V results are applied during vintage true-ups in accordance with the  
19 EM&V agreement reached by DEC, SACE and the Public Staff and approved  
20 by the Commission in its *Order Approving DSM/EE Rider and Requiring*

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<sup>2</sup> Vintage 1 is an exception in terms of length. Vintage 1 is the 19-month period beginning June 1, 2009 and ending December 31, 2010, as a result of the approval of save-a-watt programs prior to the approval of the cost recovery mechanism. The remaining save-a-watt vintages are 12-month periods aligning with calendar years as follows: Vintage 2 (January 1, 2011 through December 31, 2011); Vintage 3 (January 1, 2012 through December 31, 2012); and Vintage 4 (January 1, 2013 through December 31, 2013).

1        *Filing of Proposed Customer Notice* issued on November 8, 2011 in Docket  
2        No. E-7, Sub 979 (“EM&V Agreement”). The true-ups for each vintage also  
3        incorporate the difference between (1) the revenues collected based on billings  
4        at 85% of targeted savings, which in turn are established based upon estimated  
5        participation levels and initial assumptions of load impacts; and (2) the  
6        amount of revenues that DEC is permitted to collect under the Save-a-Watt  
7        Settlement based on actual participation levels and load impacts. The vintage  
8        true-ups also provide the opportunity to recover the cost of pilot programs or  
9        new programs introduced during a vintage year.

10            After the end of the four-year modified save-a-watt pilot, the Save-a-  
11        Watt Settlement calls for a final true-up, which includes a final comparison of  
12        the revenues collected from customers through Rider EE during the modified  
13        save-a-watt pilot to 100% of the amount of revenue DEC is authorized to  
14        collect from customers based on the independently measured and verified  
15        results as described in the Save-a-Watt Settlement. The Company will flow  
16        the difference through to, or collect from, customers where appropriate. If  
17        there are amounts owed to customers, DEC will refund such amounts with  
18        interest at a rate to be determined by the Commission in the first true-up  
19        proceeding in which an over-collection occurs.

20            The final true-up process also includes calculations that determine the  
21        earnings for the entire program and ensure that the level of DEC’s  
22        compensation is capped so that the after-tax rate of return on actual program

1 costs applicable to EE and DSM programs does not exceed the predetermined  
2 earnings cap levels set out in the Save-a-Watt Settlement.

3 **Q. PLEASE EXPLAIN THE OPT-OUT PROCESS FOR NON-**  
4 **RESIDENTIAL CUSTOMERS.**

5 A. In its *Order Granting Waiver, in Part, and Denying Waiver, in Part* (“Waiver  
6 Order”) issued April 6, 2010 in Docket No. E-7, Sub 938, the Commission  
7 approved, in part, DEC’s request for waiver of Commission Rule R8-69(d)(3),  
8 thereby allowing the Company to permit qualifying non-residential  
9 customers<sup>3</sup> to opt out of the DSM and/or EE portion of Rider EE during  
10 annual election periods. If a customer opts into a DSM program (or never  
11 opted out), the customer is required to participate for three years in the  
12 approved save-a-watt DSM programs and rider. If a customer chooses to  
13 participate in an EE program (or never opted out), that customer is required to  
14 pay the EE-related avoided cost revenue requirements and the net lost  
15 revenues for the corresponding vintage of the programs in which it  
16 participated. Customers that opt out of DEC’s DSM and/or EE programs  
17 remain opted-out for the term of the save-a-watt pilot, unless they choose to  
18 opt back in during any of the succeeding annual election periods, which occur  
19 from November 1 to December 31 each year. If a customer participates in any  
20 vintage of programs, the customer is subject to all true-up provisions of the  
21 approved Rider EE for any vintage in which the customer participates.

22 **Q. WHAT ARE THE SAVE-A-WATT COMPONENTS OF RIDER 7?**

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<sup>3</sup> Individual commercial customer accounts with annual energy usage of not less than 1,000,000 kWh and any industrial customer account.



1 A. The proposed Rider 7 consists of five distinct components related to the save-  
2 a-watt pilot: (1) an EMF component designed to collect the final half year of  
3 net lost revenues for Vintage 4;<sup>4</sup> (2) an EMF component that consists of the  
4 true-up of the third year of net lost revenues for Vintage 4 EE programs; (3)  
5 an EMF component that consists of the true-up of the final year of net lost  
6 revenues for participants in Vintage 3 EE programs;<sup>5</sup> (4) an EMF component  
7 for Vintages 1-4 resulting from the final EM&V; and (5) an EMF component  
8 for Vintages 1-4 resulting from the final save-a-watt true-up.

9 **Q. WILL RIDER 7 BE THE FINAL RIDER CONTAINING**  
10 **COMPONENTS RELATING TO SAVE-A-WATT VINTAGES?**

11 A. Yes. No further true-ups of save-a-watt vintages will be performed. The filing  
12 in this Docket is the last filing reflecting charges relating to the save-a-watt  
13 pilot, and Rider 7 will represent the final rider associated with save-a-watt  
14 vintages.

15 **B. NEW MECHANISM**

16 **Q. PLEASE PROVIDE AN OVERVIEW OF COST RECOVERY UNDER**  
17 **THE NEW MECHANISM.**

18 A. The Company's new cost recovery mechanism, which replaces the modified  
19 save-a-watt compensation mechanism, is described in the Agreement and

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<sup>4</sup> Lost revenues associated with January through June participation in Vintage 3 have been incorporated into the Company's base rates effective September 25, 2013 (Docket No. E-7, Sub 1026). As a result, the Company will discontinue collection of net lost revenues associated with January through June participation in Vintage 3 through Rider EE effective September 25, 2013.

<sup>5</sup> Lost revenues associated with participation in Vintage 2 have been incorporated into the Company's base rates effective September 25, 2013 (Docket No. E-7, Sub 1026). As a result, the Company will discontinue collection of net lost revenues for Vintage 2 through Rider EE effective September 25, 2013.

1 Stipulation of Settlement DEC reached with the Public Staff, the North  
2 Carolina Sustainable Energy Association (“NCSEA”), EDF, SACE, the South  
3 Carolina Coastal Conservation League (“CCL”), NRDC, and the Sierra Club,  
4 which was filed with the Commission on August 19, 2013 (the “Stipulation”),  
5 and approved in the Commission’s *Order Approving DSM/EE Programs and*  
6 *Stipulation of Settlement* issued on October 29, 2013 (“Sub 1032 Order”).  
7 The new mechanism is designed to allow DEC to collect revenue equal to its  
8 incurred program costs<sup>6</sup> for a rate period plus a Portfolio Performance  
9 Incentive (“PPI”) based on shared savings achieved by DEC’s DSM and EE  
10 programs, and to recover net lost revenues for EE programs only.

11 The Company will continue the practice previously approved by the  
12 Commission for the modified save-a-watt pilot program which allowed it to  
13 recover net lost revenues associated with a particular vintage for a maximum  
14 of 36 months or the life of the measure, and provided that the recovery of net  
15 lost revenues shall cease upon the implementation of new rates in a general  
16 rate case to the extent that the new rates are set to recover net lost revenues.

17 Like the modified save-a-watt pilot, the new recovery mechanism  
18 employs a vintage year concept based on the calendar year.<sup>7</sup> In each of its  
19 annual rider filings, DEC plans to perform an annual true-up process for the  
20 prior calendar year vintage. The true-up will reflect actual participation and

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<sup>6</sup> Program costs are defined under Rule R8-68(b)(1) as all reasonable and prudent expenses expected to be incurred by the electric public utility, during a rate period, for the purpose of adopting and implementing new DSM and EE measures previously approved pursuant to Rule R8-68.

<sup>7</sup> To distinguish from save-a-watt vintages, each vintage under the new mechanism is referred to by the calendar year of its respective rate period (e.g., Vintage 2016).

1 verified EM&V results for the most recently completed vintage, applied in the  
2 same manner as agreed upon in the EM&V Agreement.

3 The Company has implemented deferral accounting for over- and  
4 under-recoveries of costs that are eligible for recovery through the annual  
5 DSM/EE rider. Under the Stipulation, the balance in the deferral account(s),  
6 net of deferred income taxes, may accrue a return at the net-of-tax rate of  
7 return rate approved in DEC's then most recent general rate case. The  
8 methodology used for the calculation of interest shall be the same as that  
9 typically utilized for DEC's Existing DSM Program rider proceedings.  
10 Pursuant to Commission Rule R8-69(c)(3), DEC will not accrue a return on  
11 net lost revenues or the PPI. Miller Exhibit 2, pages 9 through 12, shows the  
12 calculation performed as part of the true-up of Vintage 2014.

13 The Company expects that most EM&V will be available in the  
14 timeframe needed to true-up each vintage in the following calendar year. If  
15 any EM&V results for a vintage are not available in time for inclusion in  
16 DEC's next annual rider filing, however, then the Company will make an  
17 appropriate adjustment in the next subsequent annual filing.

18 **Q. HOW DOES DEC CALCULATE THE PPI?**

19 A. Pursuant to the Stipulation, DEC calculates the dollar amount of PPI by  
20 multiplying the shared savings achieved by the system portfolio of DSM and  
21 EE programs by 11.5%. Company witness Conitsha Barnes further describes  
22 the specifics of the PPI calculation in her testimony. In addition, Barnes  
23 Exhibit 1 page 6 shows the revised PPI for Vintage 2014 based on updated

1 EM&V results, and Barnes Exhibit 1 page 7 shows the estimated PPI by  
2 program type and customer class for Vintage Year 2016. As referenced on  
3 page 5 and page 7 of Miller Exhibit 2, the system amount of PPI is then  
4 allocated to North Carolina retail customer classes in order to derive customer  
5 rates.

6 **Q. HOW DO CHANGES TO DEC'S OPT-OUT PROVISIONS AFFECT**  
7 **COST RECOVERY UNDER THE MECHANISM?**

8 A. Company witness Barnes discusses an enhancement to the current opt-out  
9 provisions in order to increase participation in DEC's programs, namely an  
10 additional opportunity for qualifying customers to opt in to DEC's EE and/or  
11 DSM programs during the first five business days of March. Under the new  
12 mechanism, DEC will continue its practice of charging Rider EE to all  
13 customers who have not elected to opt out during an enrollment period and  
14 who participate in any vintage of programs. Such customers would be subject  
15 to all true-up provisions of the approved Rider EE for any vintage in which  
16 the customers participate. In addition, customers who choose to begin  
17 participating in DEC's EE and DSM programs during the special "opt-in  
18 period" during March of each year will be retroactively billed the applicable  
19 Rider EE amounts back to January 1 of the vintage year, such that they will  
20 pay the appropriate Rider EE amounts for the full rate period.

21 **Q. WHAT ARE THE NEW MECHANISM COMPONENTS OF RIDER 7?**

22 A. The proposed Rider 7 consists of five distinct components related to the new  
23 mechanism: (1) a prospective Vintage 2014 component designed to collect the

1 third year of estimated net lost revenues for DEC's 2014 vintage of EE  
2 programs; (2) a true-up of Vintage 2014 program costs, shared savings and  
3 participation for EE as well as DSM programs; (3) a prospective Vintage 2015  
4 component designed to collect the second year of estimated lost revenues for  
5 DEC's 2015 vintage of EE programs; (4) a prospective 2016 component  
6 designed to collect program costs, an earned incentive (*i.e.*, the PPI), and the  
7 first year of net lost revenues for DEC's 2016 vintage of EE programs; and (5)  
8 a prospective Vintage 2016 component designed to collect program costs and  
9 the PPI for DEC's 2016 vintage of DSM programs.

10 **C. CALCULATIONS CONSISTENT IN BOTH RECOVERY**  
11 **MECHANISMS**

12 **Q. HOW DOES DEC ALLOCATE REVENUE REQUIREMENTS TO THE**  
13 **NORTH CAROLINA RETAIL JURISDICTION AND TO THE**  
14 **RESIDENTIAL AND NON-RESIDENTIAL RATE CLASSES?**

15 A. The Company allocates both save-a-watt and the new portfolio revenue  
16 requirements related to program costs and incentives for EE programs targeted  
17 at retail residential customers across North Carolina and South Carolina to its  
18 North Carolina retail jurisdiction based on the ratio of North Carolina retail  
19 kWh sales (grossed up for line losses) to total retail kWh sales (grossed up for  
20 line losses), and then recovers them only from North Carolina residential  
21 customers. The revenue requirements related to EE programs targeted at retail  
22 non-residential customers across North Carolina and South Carolina are  
23 allocated to North Carolina retail jurisdiction based on the ratio of North

1 Carolina retail kWh sales (grossed up for line losses) to total retail kWh sales  
2 (grossed up for line losses), and then recovered from only North Carolina  
3 retail non-residential customers. The portion of revenue requirements related  
4 to net lost revenues for EE programs is not allocated to North Carolina retail  
5 jurisdiction, but rather is specifically computed based on the kW and kWh  
6 savings of North Carolina retail customers.

7 For DSM programs, because residential and non-residential programs  
8 are similar in nature, the aggregated revenue requirement for all retail DSM  
9 programs targeted at both residential and non-residential customers across  
10 North Carolina and South Carolina are allocated to North Carolina retail  
11 jurisdiction based on North Carolina retail contribution to total retail peak  
12 demand. Both residential and non-residential customer classes are allocated a  
13 share of total system DSM revenue requirements based on each group's  
14 contribution to total retail peak demand.

15 The allocation factors used in DSM/EE EMF true-up calculations for  
16 each vintage are based on DEC's most recently filed Cost of Service studies at  
17 the time that the Rider EE filing incorporating the true-up is made. If there  
18 are subsequent true-ups for a vintage, DEC will use the same allocation  
19 factors as those used in the original DSM/EE EMF true-up calculations.

20 **Q. HOW DOES DEC CALCULATE THE NET LOST REVENUES FOR**  
21 **THE PROSPECTIVE COMPONENTS OF RIDER EE?**

22 A. For the prospective components of Rider EE, net lost revenues are estimated  
23 by multiplying the portion of DEC's tariff rates that represent the recovery of

1 fixed costs by the estimated North Carolina retail kW and kWh reductions  
2 applicable to EE programs by rate schedule, and reducing this amount by  
3 estimated found revenues. The Company calculates the portion of North  
4 Carolina retail tariff rates (including certain riders) representing the recovery  
5 of fixed costs by deducting the recovery of fuel and variable operation and  
6 maintenance (“O&M”) costs from its tariff rates. The lost revenues totals for  
7 residential and non-residential customers are then reduced by North Carolina  
8 retail found revenues computed using the weighted average lost revenue rates  
9 for each customer class. The testimony and exhibits of Company witness  
10 Barnes provide information on the actual and estimated found revenues which  
11 offset lost revenues.

12 **Q. HOW DOES DEC CALCULATE THE NET LOST REVENUES FOR**  
13 **THE EMF COMPONENTS OF RIDER EE?**

14 A. For the EMF components of Rider EE, DEC calculates the net lost revenues  
15 by multiplying the portion of its tariff rates that represent the recovery of fixed  
16 costs by the actual and verified North Carolina retail kW and kWh reductions  
17 applicable to EE programs by rate schedule, and reducing this amount by  
18 actual found revenues.

19 **Q. DOES DEC ADJUST THE RATE FOR NON-RESIDENTIAL**  
20 **CUSTOMERS TO ACCOUNT FOR THE IMPACT OF “OPT-OUT”**  
21 **CUSTOMERS?**

22 A. Yes. The impact of opt-out results is considered in the development of the  
23 Rider EE billing rates for non-residential customers. Since the revenue

1 requirements will not be recovered from non-residential customers that opt out  
2 of DEC's programs, the forecasted sales used to compute the rate per kWh for  
3 non-residential rates exclude sales of customers that have opted out of the  
4 vintage to which the rate applies. This adjustment is shown on Miller Exhibit  
5 6. For the final save-a-watt true-up, the most recent opt out information was  
6 used in conjunction with the most recent forecasted kWh for 2015 to reflect  
7 the most recent estimate of revenues collected. This adjustment is shown on  
8 Miller Exhibit 3, page 3 and Miller Exhibit 6, pages 1 and 2.

9 **Q. HOW DOES DEC CALCULATE THE PROPOSED BILLING**  
10 **FACTORS?**

11 A. The billing factors are computed separately for EE and DSM measures by  
12 dividing the revenue requirements for each customer class, residential and  
13 non-residential, by the forecasted sales for the rate period for the customer  
14 class. For non-residential rates, the forecasted sales exclude the estimated  
15 sales to customers who have elected to opt out of paying Rider EE. Because  
16 non-residential customers are allowed to opt out of DSM and/or EE programs  
17 separately in an annual election, non-residential billing factors are computed  
18 separately for each vintage.

19 **II. RIDER 7 COMPONENTS**

20 **Q. PLEASE DESCRIBE THE STRUCTURE OF RIDER 7 PURSUANT TO**  
21 **THE STIPULATION.**

22 A. The Stipulation provides that DEC shall calculate one integrated (prospective)  
23 DSM/EE rider and one integrated DSM/EE EMF rider for the residential



1 class, to be effective each rate period. The integrated residential DSM/EE  
2 EMF rider must include all true-ups for each vintage year appropriately  
3 considered in each proceeding. Given that qualifying non-residential  
4 customers can opt out of EE and/or DSM programs, DEC calculates separate  
5 DSM and EE billing factors for the non-residential class. Additionally, the  
6 non-residential DSM and EE EMF billing factors are determined separately  
7 for each vintage year appropriately considered in each proceeding, so that the  
8 factors can be appropriately charged to non-residential customers based on  
9 their opt-in/out status and participation for each vintage year.

10 **A. PROSPECTIVE COMPONENTS**

11 **Q. WHAT IS THE RATE PERIOD FOR THE PROSPECTIVE**  
12 **COMPONENTS OF RIDER 7?**

13 A. In accordance with the Commission's *Order on Motions for Reconsideration*  
14 issued on June 3, 2010 in Docket No. E-7, Sub 938 ("Second Waiver Order")  
15 and the Sub 1032 Order, DEC has calculated the prospective components of  
16 Rider 7 using the rate period January 1, 2016 through December 31, 2016.

17 **Q. WHAT IS THE BASIS FOR THE RATE PERIOD REVENUE**  
18 **REQUIREMENTS RELATING TO VINTAGE 2014?**

19 A. The Company determines the estimated revenue requirements for Vintage  
20 2014 separately for residential and non-residential customer classes, and bases  
21 them on the third year of net lost revenues for its Vintage 2014 EE programs.  
22 The amounts are based on estimated North Carolina retail kW and kWh

1 reductions and DEC's rates approved in its most recent general rate case,  
2 which became effective September 25, 2013.

3 **Q. PLEASE DESCRIBE THE BASIS FOR THE RATE PERIOD**  
4 **REVENUE REQUIREMENTS RELATING TO VINTAGE 2015.**

5 A. The Company determines the estimated revenue requirements for Vintage  
6 2015 separately for residential and non-residential customer classes, and bases  
7 them on the second year of net lost revenues for its Vintage 2015 EE  
8 programs. The amounts are based on estimated North Carolina retail kW and  
9 kWh reductions and DEC's rates approved in its most recent general rate case,  
10 which became effective September 25, 2013.

11 **Q. PLEASE DESCRIBE THE BASIS FOR THE RATE PERIOD**  
12 **REVENUE REQUIREMENTS RELATING TO VINTAGE 2016.**

13 A. The estimated revenue requirements for Vintage 2016 EE programs include  
14 program costs, a shared savings incentive (PPI), and the first year of net lost  
15 revenues determined separately for residential and non-residential customer  
16 classes. The estimated revenue requirements for Vintage 2016 DSM  
17 programs include program costs and a shared savings incentive (PPI). The  
18 program costs and shared savings incentive are computed at the system level  
19 and allocated to North Carolina based on the allocation methodologies  
20 discussed earlier in my testimony. The net lost revenues for EE programs are  
21 based on estimated North Carolina retail kW and kWh reductions and the rates  
22 approved in DEC's most recent general rate case, which became effective  
23 September 25, 2013.

1    **Q.    WHAT ARE DEC'S PROPOSED INITIAL BILLING FACTORS**  
2           **APPLICABLE TO NORTH CAROLINA JURISDICTIONAL**  
3           **ELECTRIC CUSTOMERS FOR THE PROSPECTIVE COMPONENTS**  
4           **OF RIDER 7?**

5    A.    The Company's proposed initial billing factor for the Rider 7 prospective  
6           components is 0.3324 cents per kWh for DEC's North Carolina retail  
7           residential customers. For non-residential customers, the amounts differ  
8           depending upon customer elections of participation. The following chart  
9           depicts the options and rider amounts:

<b>Non-Residential Billing Factors for Rider 7 Prospective Components</b>	<b>¢/kWh</b>
Vintage 2014 EE participant	0.0256
Vintage 2015 EE participant	0.0345
Vintage 2016 EE participant	0.2164
Vintage 2016 DSM participant	0.0709

17                                    **B.    TRUE-UP (EMF) COMPONENTS**

18    **Q.    WHAT IS THE TEST PERIOD FOR THE EMF COMPONENT?**

19    A.    Pursuant to the Second Waiver Order and Sub 1032 Order, the "test period"  
20           for the EMF component is defined as the most recently completed vintage  
21           year at the time of DEC's Rider EE cost recovery application filing date,  
22           which in this case is Vintage Year 2014 (January 1, 2014 through December  
23           31, 2014). In addition, the Second Waiver Order allows the EMF to cover  
24           multiple test periods. Accordingly, the test period for the EMF related to the

1 final true-up includes the four prior save-a-watt vintages: Vintage 1 (June 1,  
2 2009 through December 31, 2010); Vintage 2 (January 1, 2011 through  
3 December 31, 2011); Vintage 3 (January 1, 2012 through December 31,  
4 2012); and Vintage 4 (January 1, 2013 through December 31, 2013).

5 **Q. WHAT IS BEING “TRUED UP” FOR VINTAGE 2014?**

6 A. The chart below demonstrates which components of the Vintage 2014  
7 estimate filed in 2013 are being “trued up” in the Vintage 2014 EMF  
8 component of Rider 7. Miller Exhibit 2 contains the calculation of the true-up  
9 for Vintage 2014. The second year of net lost revenues for Vintage 2014,  
10 which are a component of Rider 6 billings during 2015, will be trued-up to  
11 actual amounts during the next rider filing.

	<b>Vintage 2014 Estimate (2014) As Filed (Filed 2013)</b>	<b>Vintage 2014 True Up (2016) (Filed March 2015)</b>
	<b>Rider 5</b>	<b>Rider 7 EMF</b>
Participation	Estimated participation assuming January 1, 2014 sign up date	Update for actual participation for January – December 2014
EM&V	Initial assumptions of load impacts	Updated according to Commission-approved EM&V Agreement
Lost Revenues	Estimated 2014 participation using half-year convention	Update for actual participation for January – December 2014 and actual 2014 lost revenue rates
Found Revenues	Estimated according to Commission-approved guidelines	Update for actual according to Commission-approved guidelines
New Programs	Only includes programs approved prior to estimated filing	Update for any new programs and pilots approved and implemented since estimated filing

1 In addition, DEC has implemented deferral accounting for the  
2 under/over collection of program costs and calculated a return at the net-of-tax  
3 rate of return rate approved in DEC's most recent general rate case. The  
4 methodology used for the calculation of interest is the same as that typically  
5 utilized for DEC's Existing DSM Program rider proceedings. Pursuant to  
6 Commission Rule R8-69(c)(3), DEC is not accruing a return on Net Lost  
7 Revenues or the PPI. See Miller Exhibit 2, pages 9 through 12 for the  
8 calculation performed as part of the true-up of Vintage Year 2014.

9 **Q. HOW WERE THE LOAD IMPACTS UPDATED?**

10 A. For DSM programs, the contracted amounts of kW reduction capability from  
11 participants are considered to be components of actual participation. As a  
12 result, the Vintage 2014 true-up reflects the actual quantity of demand  
13 reduction capability for the Vintage 2014 period. The load impacts for EE  
14 programs were updated in accordance with the Commission-approved EM&V  
15 Agreement.

16 **Q. HOW WERE ACTUAL NET LOST REVENUES COMPUTED FOR**  
17 **THE VINTAGE 2014 TRUE-UP?**

18 A. Net lost revenues for year one (2014) of Vintage 2014 were calculated using  
19 actual kW and kWh savings by North Carolina retail participants by customer  
20 class, based on actual participation and load impacts reflecting EM&V results  
21 applied according to the EM&V Agreement. The actual kW and kWh savings  
22 were as experienced during the period January 1, 2014 through December 31,  
23 2014. The rates applied to the kW and kWh savings are the rates that were in

1 effect for the period January 1, 2014 through December 31, 2014. These tariff  
2 rates have been reduced by the fuel and other variable costs. The lost  
3 revenues were then offset by actual found revenues for year one of Vintage  
4 2014 as explained by Company witness Barnes. The calculation of net lost  
5 revenues was performed by rate schedule within the residential and non-  
6 residential customer classes.

7 **Q. WHAT IS BEING “TRUED UP” FOR VINTAGE 4?**

8 A. Avoided costs for Vintage 4 EE programs are being trued up based on updated  
9 EM&V participation results and program costs. Avoided costs for Vintage 4  
10 DSM programs are being trued up to correct participation results and program  
11 costs. Net lost revenues for all years were trued up for updated EM&V  
12 participation results. The actual kW and kWh savings were as experienced  
13 during the period January 1, 2013 through December 31, 2013. The rates  
14 applied to the kW and kWh savings are the rates that were in effect during  
15 each period the lost revenues were earned.

16 **Q. WHAT IS BEING “TRUED UP” FOR VINTAGE 3?**

17 A. Avoided costs for Vintage 3 EE programs are being trued up based on updated  
18 EM&V results and program costs. Avoided costs for Vintage 3 DSM  
19 programs are being trued up to reflect participation results and program costs.  
20 Net lost revenues for all years of Vintage 3 EE programs were trued up for  
21 updated EM&V participation results. The actual kW and kWh savings were  
22 as experienced during the period July 1, 2012 through December 31, 2012.  
23 Net lost revenues associated with January through June 2012 participation in

1 Vintage 3 have been incorporated into DEC's base rates effective September  
2 25, 2013 (Docket No. E-7, Sub 1026). As a result, DEC has discontinued  
3 collection of net lost revenues associated with January through June 2012  
4 participation in Vintage 3 through Rider EE effective September 25, 2013.  
5 The rates applied to the kW and kWh savings are the rates that were in effect  
6 during each period lost revenues were earned.

7 **Q. WHAT IS BEING "TRUED UP" FOR VINTAGE 2?**

8 A. Avoided costs for Vintage 2 EE programs are being trued up based on updated  
9 EM&V participation results and program costs. Avoided costs for Vintage 2  
10 DSM programs are being also being trued up to reflect updated EM&V  
11 participation results and program costs. The actual kW and kWh savings were  
12 as experienced during the period January 1, 2011 through December 31, 2011.  
13 DEC has incorporated lost revenues associated with participation in Vintage 2  
14 into its base rates effective September 25, 2013 (Docket No. E-7, Sub 1026).  
15 As a result, Rider 7 includes collection of net lost revenues for the third year  
16 of Vintage 2 only for the period January 1, 2013 through September 25, 2013.  
17 The rates applied to the kW and kWh savings are the rates that were in effect  
18 during each period lost revenues were earned.

19 **Q. WHAT IS BEING "TRUED UP" FOR VINTAGE 1?**

20 A. Vintage 1 is being trued up to reflect updated DSM program costs.

21 **Q. WHAT IS BEING "TRUED-UP" IN THE FINAL TRUE-UP?**

22 A. The Save-a-Watt Settlement calls for a final true-up, which includes a final  
23 comparison of the revenues collected from customers through Rider EE

1 during the modified save-a-watt pilot to 100% of the amount of revenue DEC  
2 is authorized to collect from customers based on the independently measured  
3 and verified results as described in the Save-a-Watt Settlement. The final  
4 true-up process also includes calculations that determine the earnings for the  
5 entire program and ensure that DEC's compensation is capped so that the  
6 actual after-tax return on program costs applicable to EE and DSM programs  
7 costs does not exceed the predetermined earnings cap levels set out in the  
8 Save-a-Watt Settlement. The Company has updated Vintages 1-4 for the final  
9 participation and EM&V results. Therefore, although Rider 7 includes  
10 estimates for Vintage 3 Year 4 of Lost Revenue, and Vintage 4 Year 3 and 4  
11 net lost revenues, no further true-ups will be made to adjust these components  
12 of Rider 7, and all adjustments relating to the save-a-watt pilot are included in  
13 the EMF component of the Rider.

14 The Company is also revising the revenue estimated to be collected in  
15 2015 by utilizing the fall 2014 forecast and the most recent opt-out  
16 information. The recalculated 2015 estimated revenue is shown in Miller  
17 Exhibit 3, page 3 and the revised forecast and updated opt-out information is  
18 shown in Miller Exhibit 6, page 1, and Miller Exhibit 6, page 2.

19 Finally, the save-a-watt true-up clarifies the amount of gross receipts  
20 tax due and paid during the life of each vintage year. A summary of gross  
21 receipts tax rates payable for each year is included in Miller Exhibit 2, page  
22 13.



1   **Q.    AS A RESULT OF THE FINAL TRUE-UP, DOES DEC OWE ANY**  
2       **INTEREST TO CUSTOMERS? IF SO, HOW DOES IT CALCULATE**  
3       **SUCH INTEREST?**

4   A.   Yes. The Company over-collected for the Vintage 3 Non-Residential DSM  
5       program. The Company has calculated interest using the same methodology  
6       utilized in its North Carolina fuel rider proceedings, whereby interest is  
7       calculated at 10% from the mid-point of the over-collection period to the mid-  
8       point of the give-back period. This methodology benefits the customers by  
9       using a higher interest rate than DEC's weighted average cost of capital  
10      approved in its most recent rate case, and provides a simple and consistent  
11      approach to finalizing save-a-watt. The detailed calculation is shown in  
12      Miller Exhibit 2, page 8.

13   **Q.    PLEASE EXPLAIN HOW DEC DETERMINED THE EARNINGS CAP.**

14   A.   The Company computed the earnings cap by applying the applicable allowed  
15      percentage from the Save-a-Watt Settlement to the program costs based on the  
16      level of nominal avoided cost savings achieved. (The actual nominal avoided  
17      cost savings achieved during the save-a-watt pilot totaled \$925 million. *See*  
18      Barnes Exhibit 10.) In order to determine the applicable earnings cap, the  
19      actual savings of \$925 million were divided by the target savings achievement  
20      level set forth in the Save-a-Watt Settlement of \$754 million. This yields an  
21      achievement level of 123% of target savings. Pursuant to the Save-a-Watt  
22      Settlement, achievement greater than 90% of the target savings results in  
23      DEC's earnings being capped at 15% of program costs, after-tax. The

1 earnings that DEC is entitled to collect from customers during the save-a-watt  
 2 pilot cannot exceed the lesser of the total avoided cost allowed to be collected  
 3 or the program cost plus pre-tax earnings.

4 **Q. DID DEC COLLECT MORE THAN ITS EARNINGS CAP**  
 5 **CONSISTING OF PROGRAM COSTS PLUS ALLOWED RETURN?**

6 A. No. DEC did not collect more than its earnings cap consisting of program  
 7 costs plus allowed return as shown on Miller Exhibit 4.

8 **Q. WHAT ARE DEC'S PROPOSED EMF BILLING FACTORS**  
 9 **APPLICABLE TO NORTH CAROLINA ELECTRIC CUSTOMERS**  
 10 **FOR THE TRUE-UP COMPONENTS OF RIDER 7?**

11 A. The Company's proposed EMF billing factor for the true-up components of  
 12 Rider 7 is 0.0250 cents per kWh for DEC's North Carolina retail residential  
 13 customers. For non-residential customers, the amounts differ depending upon  
 14 customer elections of participation. The following chart depicts the options  
 15 and rider amounts:

<b>Non-Residential Billing Factors EMF Component</b>	<b>¢/kWh</b>
Vintage Year 2014 EE Participant	0.0151
Vintage Year 2014 DSM Participant	(0.0044)
Vintage 4 EE participant	0.0330
Vintage 4 DSM participant	0.0003
Vintage 3 EE participant	0.0259
Vintage 3 DSM participant	(0.0008)

Vintage 2 EE participant	0.0146
Vintage 2 DSM participant	0.0018
Vintage 1 EE participant	0.0025
Vintage 1 DSM participant	0.0016

### III. CONCLUSION

**Q. PLEASE SUMMARIZE THE SPECIFIC RATE MAKING APPROVAL REQUESTED BY DEC.**

A. Duke Energy Carolinas seeks approval of Rider 7, which includes the formula for calculation of the Rider, as well as the billing factors to be effective for 2016. As discussed above, Rider 7 contains (1) a prospective component, which includes the third year of net lost revenues for Vintage 2014; the second year of net lost revenues for Vintage 2015, and the revenue requirements for Vintage 2016; and (2) an EMF component related to true-ups of Vintages 1, 2, 3 and 4, which reflects final true-up under save-a-watt, as well as a true-up of Vintage 2014. Consistent with the Stipulation, for DEC's North Carolina residential customers, the Company calculated one integrated prospective billing factor and one integrated EMF billing factor for Rider 7. Also in accordance with the Stipulation, the non-residential DSM and EE billing factors have been determined separately for each vintage year and will be charged to non-residential customers based on their opt-in/out status and participation for each vintage year.

**Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

A. Yes.

Duke Energy Carolinas, LLC  
DSM/EE Cost Recovery Rider 7  
Docket Number E-7 Sub 1073  
Exhibit Summary for Rider EE Exhibits and Factors

Residential Billing Factors

Residential Billing Factor for Rider 7 True-up (EMF) Components

Line			
1	Vintage 1 EE/DSM True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 1, Line 11	\$ 1,597,468
2	Vintage 2 EE/DSM True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 2, Line 11	3,130,209
3	Vintage 3 EE/DSM True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 3, Line 11	(4,069,214)
4	Vintage 4 EE/DSM True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 4, Line 11	4,101,198
5	Year 2014 EE/DSM True-Up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 5, Line 15	672,387
6	Total True-up (EMF) Revenue Requirement	Sum Lines 1-5	\$ 5,432,048
7	Projected NC Residential Sales (kWh) for rate period	Miller Exhibit 6 pg. 1, Line 1	21,674,738,000
8	SAW EE/DSM Revenue Requirement EMF Residential Rider EE (cents per kWh)	Line 6 / Line 7 * 100	0.0251 Application

Residential Billing Factor for Rider 7 Prospective Components

9	Vintage 2014 Total EE/DSM Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg. 5, Line 15	\$ 9,088,523
10	Vintage 2015 Total EE/DSM Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg. 6, Line 1	4,071,955
11	Vintage 2016 Total EE/DSM Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg. 7, Line 11	58,886,406
12	Total Prospective Revenue Requirement	Sum Lines 9-11	\$ 72,046,884
13	Projected NC Residential Sales (kWh) for rate period	Miller Exhibit 6 pg. 1, Line 1	21,674,738,000
14	SAW EE/DSM Revenue Requirement Prospective Residential Rider EE (cents per kWh)	Line 12 / Line 13 * 100	0.3324 Application
<u>Total Revenue Requirements in Rider 7 from Residential Customers</u>			
15	Total True-up (EMF) Revenue Requirement	Line 6	\$ 5,432,048
16	Total Prospective Revenue Requirement	Line 12	72,046,884
17	Total EE/DSM Revenue Requirement for Residential Rider EE	Line 15 + Line 16	\$ 77,478,932
18	Total EE/DSM Revenue Requirement for Residential Rider EE (cents per kWh)	Line 8 + Line 14	0.3575

Non-Residential Billing Factors for Rider 7 True-up (EMF) Components

Line			
<u>SAW EE Revenue Requirements True-up (EMF)</u>			
1	Vintage 1 EE True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 1, Line 20	\$ 583,474
2	Projected Vintage 1 EE Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 pg. 1, Line 21	22,972,364,776
3	SAW EE Revenue Requirement Vintage 1 EMF Non-Residential Rider EE (cents per kWh)	Line 1/Line 2 * 100	0.0025 Application
4	Vintage 1 DSM True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 1, Line 29	\$ 370,672
5	Projected Vintage 1 DSM Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 pg. 1, Line 21	22,484,503,238
6	SAW DSM Revenue Requirement Vintage 1 EMF Non-Residential Rider EE (cents per kWh)	Line 4/Line 5 * 100	0.0016 Application
7	Vintage 2 EE True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 2, Line 20	\$ 3,410,457
8	Projected Vintage 2 EE Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 pg. 1, Line 21	23,295,755,187
9	SAW EE Revenue Requirement Vintage 2 EMF Non-Residential Rider EE (cents per kWh)	Line 7/Line 8 * 100	0.0146 Application
10	Vintage 2 DSM True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 2, Line 29	\$ 408,431
11	Projected Vintage 2 DSM Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 pg. 1, Line 21	22,950,230,628
12	SAW DSM Revenue Requirement Vintage 2 EMF Non-Residential Rider EE (cents per kWh)	Line 10/Line 11 * 100	0.0018 Application
13	Vintage 3 EE True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 3, Line 20	\$ 6,102,275
14	Projected Vintage 3 EE Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 pg. 1, Line 21	23,556,939,761
15	SAW EE Revenue Requirement Vintage 3 EMF Non-Residential Rider EE (cents per kWh)	Line 13/Line 14 * 100	0.0259 Application

**Non-Residential Billing Factors Continued**

16	Vintage 3 DSM True-up (EMF) Revenue Requirement
17	Projected Vintage 3 DSM Participants NC Non-Residential Sales (kwh) for rate period
18	<i>SAW DSM Revenue Requirement Vintage 3 EMF Non-Residential Rider EE (cents per kWh)</i>
19	Vintage 4 EE True-up (EMF) Revenue Requirement
20	Projected Vintage 4 EE Participants NC Non-Residential Sales (kwh) for rate period
21	<i>SAW EE Revenue Requirement Vintage 4 EMF Non-Residential Rider EE (cents per kWh)</i>
22	Vintage 4 DSM True-up (EMF) Revenue Requirement
23	Projected Vintage 4 DSM Participants NC Non-Residential Sales (kwh) for rate period
24	<i>SAW DSM Revenue Requirement Vintage 4 EMF Non-Residential Rider EE (cents per kWh)</i>
25	Year 2014 EE True-up (EMF) Revenue Requirement
26	Projected Vintage 4 EE Participants NC Non-Residential Sales (kwh) for rate period
27	<i>SAW EE Revenue Requirement Vintage 4 EMF Non-Residential Rider EE (cents per kWh)</i>
28	Year 2014 DSM True-up (EMF) Revenue Requirement
29	Projected Vintage 4 DSM Participants NC Non-Residential Sales (kwh) for rate period
30	<i>SAW DSM Revenue Requirement Vintage 4 EMF Non-Residential Rider EE (cents per kWh)</i>

**Non-Residential Billing Factors for Rider 7 Prospective Components**

31	Vintage 2014 EE Prospective Amounts Revenue Requirement
32	Projected Program Year 2014 EE Participants NC Non-Residential Sales (kwh) for rate period
33	<i>EE Revenue Requirement Vintage 2014 Prospective Component for Non-Residential Rider EE (cents per kWh)</i>
34	Vintage 2015 EE Prospective Amounts Revenue Requirement
35	Projected Program Year 2015 EE Participants NC Non-Residential Sales (kwh) for rate period
36	<i>EE Revenue Requirement Vintage 2015 Prospective Component for Non-Residential Rider EE (cents per kWh)</i>
37	Vintage 2016 EE Prospective Amounts Revenue Requirement
38	Projected Program Year 2016 EE Participants NC Non-Residential Sales (kwh) for rate period
39	<i>EE Revenue Requirement Vintage 2016 Prospective Component for Non-Residential Rider EE (cents per kWh)</i>
40	Vintage 2016 DSM Prospective Amounts Revenue Requirement
41	Projected Vintage 2016 DSM Participants NC Non-Residential Sales (kwh) for rate period
42	<i>DSM Revenue Requirement Vintage 2016 Prospective Component for Non-Residential Rider EE (cents per kWh)</i>

**Total EMV Rate****Total Prospective Rate****Total Revenue Requirements in Rider 7 from Non-Residential Customers**

43	Vintage 1 EE True-up (EMF) Revenue Requirement
44	Vintage 1 DSM True-up (EMF) Revenue Requirement
45	Vintage 2 EE True-up (EMF) Revenue Requirement
46	Vintage 2 DSM True-up (EMF) Revenue Requirement
47	Vintage 3 EE True-up (EMF) Revenue Requirement
48	Vintage 3 DSM True-up (EMF) Revenue Requirement
49	Vintage 4 EE True-up (EMF) Revenue Requirement
50	Vintage 4 DSM True-up (EMF) Revenue Requirement
51	Year 2014 EE True-up (EMF) Revenue Requirement
52	Year 2014 DSM True-up (EMF) Revenue Requirement
53	Vintage 2014 EE Prospective Amounts Revenue Requirement
54	Vintage 2015 EE Prospective Amounts Revenue Requirement
55	Vintage 2016 EE Prospective Amounts Revenue Requirement
56	Vintage 2016 DSM Prospective Amounts Revenue Requirement
<b>Total Non-Residential Revenue Requirement in Rider 7</b>	

**Miller Exhibit 1, page 2**

Miller Exhibit 2 pg. 3, Line 29	\$	(182,448)	
Miller Exhibit 6 pg. 1, Line 21		23,100,220,941	
Line 16/Line 17 * 100		<b>(0.0008)</b>	Application
Miller Exhibit 2 pg. 4, Line 20	\$	7,906,252	
Miller Exhibit 6 pg. 1, Line 21		23,966,011,232	
Line 19/Line 20 * 100		<b>0.0330</b>	Application
Miller Exhibit 2 pg. 4, Line 29	\$	77,767	
Miller Exhibit 6 pg. 1, Line 21		23,215,694,176	
Line 22/Line 23 * 100		<b>0.0003</b>	Application
Miller Exhibit 2 pg. 5, Line 25	\$	3,545,604	
Miller Exhibit 6 pg. 2, Line 17		23,824,291,077	
Line 25/Line 26 * 100		<b>0.0149</b>	Application
Miller Exhibit 2 pg. 5, Line 35	\$	(1,005,411)	
Miller Exhibit 6 pg. 2, Line 17		23,138,123,262	
Line 28/Line 29 * 100		<b>(0.0043)</b>	Application

Miller Exhibit 2 pg. 5, Line 25	\$	6,094,150	
Miller Exhibit 6 pg. 2, Line 17		23,824,291,077	
Line 31/Line 32 * 100		<b>0.0256</b>	Application
Miller Exhibit 2 pg. 6, Line 4	\$	8,194,003	
Miller Exhibit 6 pg. 2, Line 17		23,753,678,227	
Line 34/Line 35 * 100		<b>0.0345</b>	Application
Miller Exhibit 2 pg. 7, Line 18	\$	51,408,650	
Miller Exhibit 6 pg. 2, Line 17		23,753,678,227	
Line 37/Line 38 * 100		<b>0.2164</b>	Application
Miller Exhibit 2 pg. 7, Line 25	\$	16,375,648	
Miller Exhibit 6 pg. 2, Line 21		23,082,735,561	
Line 40/Line 41 * 100		<b>0.0709</b>	Application

**0.0895****0.3474**

Line 1	\$	583,474	
Line 4		370,672	
Line 7		3,410,457	
Line 10		408,431	
Line 13		6,102,275	
Line 16		(182,448)	
Line 19		7,906,252	
Line 22		77,767	
Line 25		3,545,604	
Line 28		(1,005,411)	
Line 31		6,094,150	
Line 34		8,194,003	
Line 37		51,408,650	
Line 40		16,375,648	
Sum (Lines 43-56)	\$	<b>103,289,524</b>	Application



Duke Energy Carolinas, LLC  
EE/DSM Vintage 1 (June 1, 2009 - December 31, 2010)  
Docket Number E-7 Sub 1073  
True-Up of Avoided Cost and Lost Revenues Revenue Requirements For Vintage 1

RESIDENTIAL

Line

1	EE Avoided Cost Component	Barnes Exhibit 1 pg. 1 and 2
2	DSM Avoided Cost Component	Barnes Exhibit 1 pg. 1 and 2
3	Total EE and DSM Avoided Cost	Line 1 + Line 2
4	Cap Adjustment factor	Miller Exhibit 4 pg. 1, Line 35
5	DSM/EE Avoided Cost Component adjusted for Cap	Line 3 + Line 4
6	Gross Receipts Tax and Regulatory Fee	Miller Exhibit 2, pg. 13
7	Adjusted Avoided Cost Revenue Requirement	Line 5 * Line 6
8	Residential Lost Revenues	Barnes Exhibit 2 pg. 1, Line 7
9	Total Residential Revenue Requirement	Line 7 + Line 8
10	Total Collected for Vintage 1 (Riders 1-5 Actuals, Rider 6 estimate)	Miller Exhibit 3 pg. 1, Line 1 + Line 7
11	Residential EE/DSM Revenue Requirement True-up Amount	Line 9 - Line 10

Rider 4	Rider 5	Rider 6	Rider 6	Rider 7	
DSM True up of Original Filing, EE Vintage 1, Year 1 and 2 True up	2014 True Up	Implementation of Earnings Cap	2015 True up of 85% to 100%	2016 True up	Vintage 1 - Residential
30,387,136	(448,752)		5,283,244		35,221,629
8,225,364			1,451,535	(11,701)	9,665,198
38,612,500	(448,752)	-	6,734,779	(11,701)	44,886,827
		(6,558,951)		387,509	(6,171,442)
38,612,500	(448,752)	(6,558,951)	6,734,779	375,808	38,715,385
1.034554	1.017953	1.001352	1.001352	1.001352	various
39,946,717	(456,808)	(6,567,819)	6,743,885	376,316	40,042,291
20,983,465	(500,574)		3,614,629		24,097,520
60,930,181	(957,381)	(6,567,819)	10,358,513	376,316	64,139,811
					62,542,343
					1,597,468

NON-RESIDENTIAL

Energy Efficiency

12	Non-Residential EE Avoided Cost Component	Barnes Exhibit 1 pg. 1 and 2
13	Cap Adjustment factor	Miller Exhibit 4 pg.1, Line 36
14	EE Avoided Cost Component Adjusted for Cap	Line 12 + Line 13
15	Gross Receipts Tax and Regulatory Fee	Miller Exhibit 2, pg. 13
16	Total Non-Residential EE Avoided Cost Revenue Requirement	Line 14 * Line 15
17	Non-Residential Lost Revenues	Barnes Exhibit 2 pg. 1, Line 16
18	Total Non-Residential EE Revenue Requirement	Line 16 + Line 17
19	Total Collected for Vintage 1 (Riders 1-5 Actuals, Rider 6 estimate)	Miller Exhibit 3 pg. 1, Line 14
20	Non-Residential EE Revenue Requirement True-up Amount	Line 18 - Line 19
21	Projected NC Non-Residential Sales (kWh) for billing period	Miller Exhibit 6 pg. 1, Line 21
22	Non-Residential Rider EE (cents per kWh)	Line 20/Line 21*100

Rider 4	Rider 5	Rider 6	Rider 6	Rider 7	
Vintage 1, Year 1 and Year 2 Net Lost Revenue True Up	2014 True up	Implementation of Earnings Cap and True up	2015 True up of 85% to 100%	2016 True up	Vintage 1 - EE
16,001,071		(3)	2,823,718		18,824,786
		(2,799,117)		150,944	(2,648,173)
16,001,071	-	(2,799,120)	2,823,718	150,944	16,176,613
1.034554	1.017953	1.001352	1.001352	1.001352	various
16,553,972	-	(2,802,904)	2,827,536	151,148	16,729,751
1,666,731	1,974		294,478		1,963,183
18,220,703	1,974	(2,802,904)	3,122,014	151,148	18,692,934
					18,109,461
18,220,703	1,974	(2,802,904)	3,122,014	151,148	583,474
					22,972,364,776
					0.0025

DSM

23	Non-Residential DSM Avoided Cost Component	Barnes Exhibit 1 pg. 1 and 2
24	Cap Adjustment factor	Miller Exhibit 4 pg. 1, Line 37
25	Non-Residential DSM Avoided Cost Component adjusted for Cap	Line 23 + Line 24
26	Gross Receipts Tax and Regulatory Fee	Miller Exhibit 2, pg. 13
27	Total Non-Residential DSM Revenue Requirement	Line 25 * Line 26
28	Total Collected for Vintage 1 (Riders 1-5 Actuals, Rider 6 estimate)	Miller Exhibit 3 pg. 1, Line 20
29	Non-Residential DSM Revenue Requirement True-up Amount	Line 27 -Line 28
30	Projected NC Non-Residential Sales (kWh) for billing period	Miller Exhibit 6 pg. 1, Line 21
31	Non-Residential Rider EE (cents per kWh)	Line 29/Line 30*100

Rider 4	Rider 5	Rider 6	Rider 6	Rider 7	
2013 True up of Original Filing	2014 True up	2015 True up of Costs	2015 True up of 85% to 100%	2016 True up	Vintage 1 - DSM
\$ 9,644,425			1,701,957	\$ (13,709)	11,332,673
		(1,629,074)		68,880	(1,560,194)
9,644,425	-	(1,629,074)	1,701,957	55,171	9,772,479
1.034554	1.017953	1.001352	1.001352	1.001352	various
9,977,678	-	(1,631,277)	1,704,258	55,246	10,105,906
					9,735,234
					370,672
					22,484,503,238
					0.0016

<sup>1</sup> Adjustments to DSM participation were identified and trued up in 2014.  
<sup>2</sup> The cap adjustment factor was updated in Miller Exhibit 4 for actual 2014 collections and estimated 2015 collections.

Duke Energy Carolinas, LLC  
EE/DSM Vintage 2 ( January 1, 2011 - December 31, 2011)  
Docket Number E-7, Sub 1073  
True-Up of Avoided Cost and Lost Revenues Revenue Requirements For Vintage 2

Miller Exhibit 2, page 2

RESIDENTIAL

Line

1	EE Avoided Cost Component	Barnes Exhibit 1 pg. 3, Line 7
2	DSM Avoided Cost Component	Barnes Exhibit 1 pg. 3, Line 8
3	Total EE and DSM Avoided Cost	Line 1 + Line 2
4	Cap Adjustment factor	Miller Exhibit 4 pg. 1, Line 35
5	DSM/EE Avoided Cost Component adjusted for Cap	Line 3 + Line 4
6	Gross Receipts Tax and Regulatory Fee	Miller Exhibit 2, pg. 13
7	Adjusted Avoided Cost Revenue Requirement	Line 5 * Line 6
8	Residential Lost Revenues	Barnes Exhibit 2 pg. 1
9	Total Residential Revenue Requirement	Line 7 + Line 8
10	Total Collected for Vintage 2 (Riders 2-5 Actuals, Rider 6 estimate)	Miller Exhibit 3 pg. 1, Line 2 + Line 8
11	Residential EE/DSM Revenue Requirement True-up Amount	Line 9 - Line 10

Rider 3	Rider 4	Rider 5	Rider 6	Rider 6	Rider 7	
Year 2 Lost Revenues	DSM True up of Original Filing, EE Vintage 1, Year 1 and 2 True up	2014 True up	Implementation of Earnings Cap and Lost Revenue True up	2015 True up of 85% to 100%	2016 True up	Vintage 2 - Residential
	26,136,185	(170,313)		4,582,213		30,548,085
	8,254,399			1,456,659	(9,391)	9,701,667
	34,390,584	(170,313)	-	6,038,871	(9,391)	40,249,752
			(6,424,112)		2,317,861	(4,106,251)
	34,390,584	(170,313)	(6,424,112)	6,038,871	2,308,470	36,143,501
	1.034554	1.017953	1.001352	1.001352	1.001352	various
	35,578,917	(173,370)	(6,432,797)	6,047,036	2,311,591	37,331,376
8,004,542	6,258,786	7,255,706	13,337,882	3,797,477		38,654,393
8,004,542	41,837,703	7,082,336	6,905,085	9,844,513	2,311,591	75,985,769
						72,855,560
						3,130,209
						See Miller Exhibit A for rate

NON-RESIDENTIAL  
Energy Efficiency

12	Non-Residential EE Avoided Cost Component	Barnes Exhibit 1 pg. 3, Line 16
13	Cap Adjustment factor	Miller Exhibit 4 pg. 1, Line 36
14	EE Avoided Cost Component Adjusted for Cap	Line 12 + Line 13
15	Gross Receipts Tax and Regulatory Fee	Miller Exhibit 2, pg. 13
16	Total Non-Residential EE Avoided Cost Revenue Requirement	Line 14 * Line 15
17	Non-Residential Lost Revenues	Barnes Exhibit 2 pg. 1
18	Total Non-Residential EE Revenue Requirement	Line 16 + Line 17
19	Total Collected for Vintage 2 (Riders 2-5 Actuals, Rider 6 estimate)	Miller Exhibit 3 pg. 1, Line 15
20	Non-Residential EE Revenue Requirement True-up Amount	Line 18 - Line 19
21	Projected NC Non-Residential Sales (kWh) for billing period	Miller Exhibit 6 pg. 1, Line 21
22	Non-Residential Rider EE (cents per kWh)	Line 20/Line 21*100

Rider 3	Rider 4	Rider 5	Rider 6	Rider 6	Rider 7	
Year 2 Lost Revenues	Vintage 2 True up, and Year 1 Net Lost Revenue True Up	2014 True up	Implementation of Earnings Cap and True up	2015 True up of 85% to 100%	2016 True up	Vintage 2 - EE
	18,308,367			3,230,888	973,347	22,512,602
			(3,144,091)		391,618	(2,752,473)
	18,308,367	-	(3,144,091)	3,230,888	1,364,965	19,760,129
	1.034554	1.017953	1.001352	1.001352	1.001352	various
	18,940,994	-	(3,148,342)	3,235,256	1,366,810	20,394,719
951,833	1,158,807	1,388,161	1,974,320	617,436	1,032,441	7,122,998
951,833	20,099,801	1,388,161	(1,174,022)	3,852,692	2,399,251	27,517,717
						24,107,260
951,833	20,099,801	1,388,161	(1,174,022)	3,852,692	2,399,251	3,410,457
						23,295,755,187
						0.0146

DSM

23	Non-Residential DSM Avoided Cost Component	Barnes Exhibit 1 pg. 3, Line 17
24	Cap Adjustment factor	Miller Exhibit 4 pg. 1, Line 37
25	Non-Residential DSM Avoided Cost Component adjusted for Cap	Line 23 + Line 24
26	Gross Receipts Tax and Regulatory Fee	Miller Exhibit 2, pg. 13
27	Total Non-Residential DSM Revenue Requirement	Line 25 * Line 26
28	Total Collected for Vintage 2 (Riders 2-5 Actuals, Rider 6 estimate)	Miller Exhibit 3 pg. 1, Line 21
29	Non-Residential DSM Revenue Requirement True-up Amount	Line 27-Line 28
30	Projected NC Non-Residential Sales (kWh) for billing period	Miller Exhibit 6 pg. 1, Line 21
31	Non-Residential Rider EE (cents per kWh)	Line 29/Line 30*100

Rider 4	Rider 5	Rider 6	Rider 6	Rider 7	
2013 True up of Original Filing & year 1 Lost Revenues	2014 True up	2015 True up of Costs	2015 True up of 85% to 100%	2016 True up	Vintage 2 - DSM
\$ 10,817,002			1,908,883	\$ (12,307)	\$ 12,713,578
		(1,823,758)		72,441	(1,751,317)
10,817,002	-	(1,823,758)	1,908,883	60,134	10,962,261
1.034554	1.017953	1.001352	1.001352	1.001352	various
11,190,773	-	(1,826,224)	1,911,464	60,215	11,336,228
					10,927,797
					408,431
					22,950,230,628
					0.0018

<sup>1</sup> Adjustments to DSM participation were identified and trued up in 2014. The Company has also received final EM&V and participation for EE programs.

<sup>2</sup> The cap adjustment factor was updated in Miller Exhibit 4 for actual 2014 collections and estimated 2015 collections.

<sup>3</sup> Lost Revenue estimates have been subject to a final true-up subject to results of EM&V and participation. Year by year details are shown at Barnes Exhibit 2 page 1. component can be found at Barnes Exhibit 1, page 3 and revised details of the lost revenue estimate can be found in Barnes Exhibit 2, page 1.

Duke Energy Carolinas, LLC  
EE/DSM Vintage 3 ( January 1, 2012 - December 31, 2012)  
Docket Number E-7, Sub 1073  
True-Up of Avoided Cost Revenue Requirements For Vintage 3  
True-up of Lost Revenues for Years 1, 2 and 3

RESIDENTIAL

Line		
1	EE Avoided Cost Component	Barnes Exhibit 1 pg. 4, Line 8
2	DSM Avoided Cost Component	Barnes Exhibit 1 pg. 4, Line 9
3	Total EE and DSM Avoided Cost	Line 1 + Line 2
4	Cap Adjustment factor	Miller Exhibit 4 pg. 1, Line 35
5	DSM/EE Avoided Cost Component adjusted for Cap	Line 3 + Line 4
6	Gross Receipts Tax and Regulatory Fee	Miller Exhibit 2, pg. 13
7	Adjusted Avoided Cost Revenue Requirement	Line 5 * Line 6
8	Residential Lost Revenues	Barnes Exhibit 2 pg. 1
9	Total Residential Revenue Requirement	Line 7 + Line 8
10	Total Collected for Vintage 3 (Riders 3-5 Actuals, Rider 6 estimate)	Miller Exhibit 3 pg. 1, Line 3 + Line 9
11	Residential EE/DSM Revenue Requirement True-up Amount	Line 9 - Line 10

Rider 5	Rider 4	Rider 6	Rider 6	Rider 6	Rider 7		
True up of Original Filing & Year 3 Lost Rev. Estimate	2013 Year 2 Lost Revenues	2014 True up of Costs, year 1 & 2 & Year 3 Lost Revenues	2015 Y4 Lost Revenue Estimate	2015 True up of 85% to 100%	2016 True up		Vintage 3 - Residential
19,337,997		24,489		3,412,588	(177,138)	<sup>1</sup>	22,597,936
8,254,399		2,954,233		1,456,659	(7,883)	<sup>1</sup>	12,657,408
27,592,397	0	2,978,722	0	4,869,246	(185,021)		35,255,344
-		(4,744,563)			(935,759)	<sup>2</sup>	(5,680,322)
27,592,397	-	(1,765,841)	-	4,869,246	(1,120,780)		29,575,022
1.017953	1.034554	1.001352	1.001352	1.001352	1.001352		various
28,087,763	-	(1,768,228)	-	4,875,830	(1,122,295)		30,073,069
10,158,215	3,047,820	5,574,330	1,595,954	2,330,477	2,992,431	<sup>3</sup>	25,699,227
38,245,978	3,047,820	3,806,101	1,595,954	7,206,306	1,870,136		55,772,295
							59,841,509
							(4,069,214)

See Miller Exhibit A for rate

NON-RESIDENTIAL  
Energy Efficiency

12	Non-Residential EE Avoided Cost Component	Barnes Exhibit 1 pg. 4, Line 17
13	Cap Adjustment factor	Miller Exhibit 4 pg. 1, Line 36
14	EE Avoided Cost Component Adjusted for Cap	Line 12 + Line 13
15	Gross Receipts Tax and Regulatory Fee	Miller Exhibit 2, pg. 13
16	Total Non-Residential EE Avoided Cost Revenue Requirement	Line 14 * Line 15
17	Non-Residential Lost Revenues	Barnes Exhibit 2 pg. 1
18	Total Non-Residential EE Revenue Requirement	Line 16 + Line 17
19	Total Collected for Vintage 3 (Riders 3-5 Actuals, Rider 6 estimate)	Miller Exhibit 3 pg. 1, Line 16
20	Non-Residential EE Revenue Requirement True-up Amount	Line 18 - Line 19
21	Projected NC Non-Residential Sales (kWh) for billing period	Miller Exhibit 6 pg. 1, Line 21
22	Non-Residential Rider EE (cents per kWh)	Line 20/Line 21*100

Rider 5	Rider 4	Rider 6	Rider 6	Rider 6	Rider 7		
True up of Original Filing & Year 3 Lost Rev. Estimate	2013 Year 2 Lost Revenues	2014 True up of Costs, year 1 & 2 & Year 3 Lost Revenues	2015 Y4 Lost Revenue Estimate	2015 True up of 85% to 100%	2016 True up		Vintage 3 - Non-Residential EE
27,084,888		715,578		4,779,686	516,587	<sup>1</sup>	33,096,739
		(4,657,296)			58,925	<sup>2</sup>	(4,598,371)
27,084,888	-	(3,941,718)	-	4,779,686	575,512		28,498,368
1.034554	1.034554	1.017953	1.001352	1.001352	1.001352		various
28,020,779	-	(4,012,484)	-	4,786,148	576,290		29,370,734
3,981,059	1,418,749	3,017,303	1,205,284	952,907	3,025,638	<sup>3</sup>	13,600,940
32,001,838.3	1,418,749	(995,181)	1,205,284	5,739,055	3,601,928		42,971,674
							36,869,399
							6,102,275
							23,556,939,761
							0.0259

Note: Vintage 3 Year 3 lost revenues will be trued up in Rider 7

DSM

23	Non-Residential DSM Avoided Cost Component	Barnes Exhibit 1 pg. 4
24	Cap Adjustment factor	Miller Exhibit 4
25	Non-Residential DSM Avoided Cost Component adjusted for Cap	Line 23 + Line 24
26	Gross Receipts Tax and Regulatory Fee	Miller Exhibit 2, pg. 13
27	Total Non-Residential DSM Revenue Requirement	Line 25 * Line 26
28	Total Collected for Vintage 3 (Riders 3-5 Actuals, Rider 6 estimate)	Miller Exhibit 3 pg. 1
29	Non-Residential DSM Revenue Requirement True-up Amount	Line 27-Line 28
30	Interest due to Vintage 3 DSM Non-Residential Customers	Miller Exhibit 8 Line 18
31	Total Non-Residential Vintage 3 Revenue Requirement	Line 29+ Line 30
32	Projected NC Non-Residential Sales (kWh) for billing period	Miller Exhibit 6 pg. 1
33	Non-Residential Rider EE (cents per kWh)	Line 31/Line 32*100

Rider 5	Rider 4	Rider 6	Rider 6	Rider 6	Rider 7		
True up of Original Filing & Year 3 Lost Rev. Estimate	2013 Year 2 Lost Revenues	2014 True up of Costs, year 1 & 2 & Year 3 Lost Revenues	Implementation of Earnings Cap	2015 True up of 85% to 100%	2016 True up		Vintage 3 - Non-Residential DSM
10,817,002		1,772,361		1,908,883	(9,025)	<sup>1</sup>	14,489,221
			(1,860,003)		(246,969)	<sup>2</sup>	(2,106,972)
10,817,002	-	1,772,361	(1,860,003)	1,908,883	(255,994)		12,382,249
1.034554	1.034554	1.017953	-	-	-		various
11,190,773	-	1,804,180	-	-	-		12,994,953
							13,146,993
							(152,040)
							(30,408)
							(182,448)
							23,100,220,941
							(0.0008)

<sup>1</sup> Adjustments to DSM participation were identified and trued up in 2014. The Company has also received final EM&V and participation for EE programs.

<sup>2</sup> The cap adjustment factor was updated in Miller Exhibit 4 for actual 2014 collections and estimated 2015 collections.

<sup>3</sup> Updated lost revenues by year can be found in Barnes Exhibit 2, page 1. Year 2015 has been updated with most recent participation and lost revenue rates as this is the final SAW true up.



Duke Energy Carolinas, LLC  
EE Vintage 4 ( January 1, 2013 - December 31, 2013)  
Docket Number E-7, Sub 1073  
True-Up of Avoided Cost Revenue Requirements & Net Lost Revenues For Vintage 4 Year 1,2 and 3  
and Estimate of Year 4 Net Lost Revenues for Vintage 4

RESIDENTIAL

Line

- 1 EE Avoided Cost Component
- 2 DSM Avoided Cost Component
- 3 Total EE and DSM Avoided Cost
- 4 Cap Adjustment factor
- 5 DSM/EE Avoided Cost Component adjusted for Cap
- 6 Gross Receipts Tax and Regulatory Fee
- 7 Adjusted Avoided Cost Revenue Requirement
- 8 Residential Lost Revenues
- 9 Total Residential Revenue Requirement
- 10 Total Collected for Vintage 4 (Rider 4 -5 Actuals, Rider 6 Estimate)
- 11 Residential EE/DSM Revenue Requirement True-up Amount

Barnes Exhibit 1 pg. 5, Line 8  
Barnes Exhibit 1 pg. 5, Line 9  
Line 1 + Line 2  
Miller Exhibit 4 pg. 1, Line 35  
Line 3 + Line 4  
Miller Exhibit 2, pg. 13  
Line 5 \* Line 6  
Barnes Exhibit 2 pg. 1  
Line 7 + Line 8  
Miller Exhibit 3 pg. 1, Line 4 + Line 10  
Line 9 - Line 10

Rider 4	Rider 5	Rider 6	Rider 6	Rider 7		Vintage 4 - Residential
2013 Original Filing	2014 Y2 Lost Revenue	2015 True up of Costs & Year 3 Lost Revenues	2015 True up of 85% to 100%	2016 True up		
5,965,462		11,558,766	1,052,729	(1,109,310)	<sup>1</sup>	17,467,647
11,275,591		(133,778)	1,989,810	748,905	<sup>1</sup>	13,880,528
17,241,053		11,424,988	3,042,539	(360,405)		31,348,175
		(2,928,359)		(1,716,231)	<sup>2</sup>	(4,644,590)
17,241,053		8,496,629	3,042,539	(2,076,636)		26,703,585
1.034554	1.017953	1.001352	1.001352	1.001352		various
17,836,801		8,508,116	3,046,652	(2,079,444)		27,312,126
1,222,507	3,086,106	16,473,937	215,736	6,059,612	<sup>3</sup>	27,057,898
19,059,307	3,086,106	24,982,053	3,262,389	3,980,168		54,370,024
						50,268,825
						4,101,198

See Miller Exhibit A for rate

NON-RESIDENTIAL

Energy Efficiency

- 12 Non-Residential EE Avoided Cost Component
- 13 Cap Adjustment factor
- 14 EE Avoided Cost Component Adjusted for Cap
- 15 Gross Receipts Tax and Regulatory Fee
- 16 Total Non-Residential Avoided Cost Revenue Requirement
- 17 Non-Residential Lost Revenues
- 18 Total Non-Residential EE Revenue Requirement
- 19 Total Collected for Vintage 4 (Rider 4-5 Actuals, Rider 6 Estimate)
- 20 Non-Residential EE Revenue Requirement True-up Amount
- 21 Projected NC Non-Residential Sales (kWh) for billing period
- 22 Non-Residential Rider EE (cents per kWh)

Barnes Exhibit 1 pg. 5, Line 16  
Miller Exhibit 4 pg. 1, Line 36  
Line 12 + Line 13  
Miller Exhibit 2, pg. 13  
Line 14 \* Line 15  
Barnes Exhibit 2 pg. 1  
Line 16 + Line 17  
Miller Exhibit 3 pg. 1, Line 17  
Line 18 -Line 19  
Miller Exhibit 6 pg. 1, Line 21  
Line 20/Line 21\*100

Rider 4	Rider 5	Rider 6	Rider 6	Rider 7		Vintage 4 - EE
2013 Original Filing	2014 True up	2015 True up of Costs & Year 3 Lost Revenues	2015 True up of 85% to 100%	2016 True up		
18,760,423		9,250,045	3,310,663	218,976	<sup>1</sup>	31,540,107
		(3,215,288)		(1,091,871)	<sup>2</sup>	(4,307,159)
18,760,423	-	6,034,757	3,310,663	(872,895)		27,232,948
1.034554	1.017953	1.001352	1.001352	1.001352		various
19,408,671	-	6,042,916	3,315,139	(874,075)		27,892,651
632,182	2,817,719	7,776,143	111,561	6,064,245	<sup>3</sup>	17,401,850
20,040,852	2,817,719	13,819,059	3,426,700	5,190,170		45,294,500
						37,388,248
						7,906,252
						23,966,011,232
						0.0330

DSM

- 23 Non-Residential DSM Avoided Cost Component
- 24 Cap Adjustment factor
- 25 Non-Residential DSM Avoided Cost Component adjusted for Cap
- 26 Gross Receipts Tax and Regulatory Fee
- 27 Total Non-Residential DSM Revenue Requirement
- 28 Total Collected for Vintage 4 (Rider 4-5 Actuals, Rider 6 Estimates)
- 29 Non-Residential DSM Revenue Requirement True-up Amount
- 30 Projected NC Non-Residential Sales (kWh) for billing period
- 31 Non-Residential Rider EE (cents per kWh)

Barnes Exhibit 1 pg. 5, Line 17  
Miller Exhibit 4 pg. 1, Line 37  
Line 23 + Line 24  
Miller Exhibit 2, pg. 13  
Line 25 \* Line 26  
Miller Exhibit 3 pg. 1, Line 23  
Line 27 - Line 28  
Miller Exhibit 6 pg. 1, Line 21  
Line 29/Line 30\*100

Rider 4	Rider 5	Rider 6	Rider 6	Rider 7		Vintage 4 - DSM
2013 Original Filing	2014 True up	2015 True up of Costs	2015 True up of 85% to 100%	True-up		
\$ 14,776,131		(101,621)	2,607,553	\$ (468,103)	<sup>1</sup>	\$ 16,813,960
		(2,357,201)		(24,965)	<sup>2</sup>	(2,382,166)
14,776,131		(2,458,822)	2,607,553	(493,067)		14,431,795
1.034554		1.001352	1.001352	1.001352		various
15,286,706		(2,462,146)	2,611,078	(493,734)		14,941,904
						14,864,137
						\$ 77,767
						23,215,694,176
						0.0003

<sup>1</sup> Adjustments to DSM participation were identified and trued up in 2014. The Company has also received final EM&V and participation for EE programs.  
<sup>2</sup> The cap adjustment factor was updated in Miller Exhibit 4 for actual 2014 collections and estimated 2015 collections.  
<sup>3</sup> Note: Updated lost revenues by year can be found in Barnes Exhibit 2, page 1. Year 2015 has been updated with most recent participation and lost revenue rates as this is the final SAW true up. In addition, 2016 year 4 has been included as a final estimate.

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1073  
Estimated Year 3 Lost Revenues and True up Year 1 for Vintage Year 2014

RESIDENTIAL  
Energy Efficiency Programs

Line	Reference	Year 2014 Yr 3 LR Estimate	Rider 5 Original		Year 2014 Year 1
			Estimate	True up	
1	Residential EE Program Cost	Barnes Exhibit 1 pg. 6, Line 8 * NC Alloc. Factor	\$ 29,754,660	\$ (1,844,170)	\$ 27,910,490
2	Residential EE Earned Utility Incentive	Barnes Exhibit 1 pg. 6, Line 8 * NC Alloc. Factor	2,242,156	2,715,537	4,957,693
3	Return on undercollection of Residential EE Program Costs	Miller Exhibit 2 pg 9		33,485	33,485
4	Total EE Program Cost and Incentive Components	Line 1 + Line 2 + line 3	31,996,816	904,852	32,901,668
5	Residential DSM Program Cost	Barnes Exhibit 1 pg. 6, Line 9 * NC Alloc. Factor	13,143,935	(2,535,104)	10,608,831
6	Residential DSM Earned Utility Incentive	Barnes Exhibit 1 pg. 6, Line 9 * NC Alloc. Factor	3,240,520	(12,767)	3,227,753
7	Return on overcollection of Residential DSM Program Costs	Miller Exhibit 2 pg 10		(43,209)	(43,209)
8	Total DSM Program Cost and Incentive Components	Line 5 + Line 6 + Line 7	16,384,455	(2,591,080)	13,793,375
9	Total EE/DSM Program Cost and Incentive Components	Line 4 + Line 8	48,381,271	(1,686,228)	46,695,043
10	Revenue-related taxes and regulatory fees factor	Miller Exhibit 2, pg. 13	1.017953	1.001352	
11	Total EE/DSM Program Cost and Incentive Revenue Requirement	Line 9 * Line 10	49,249,860	(1,688,508)	47,561,352
12	Residential Net Lost Revenues	Barnes Exhibit 2 pg. 2	8,435,982	3,065,327	11,501,309
13	Total Residential EE/DSM Revenue Requirement	Line 11 + Line 12	57,685,842	1,376,819	59,062,661
14	Total Collected for Year 2014 (Rider 5)	Miller Exhibit 3 pg. 1, Line 5 + Line 11			58,390,274
15	Total Residential EE/DSM Revenue Requirement	Line 11 + Line 12	\$ 9,088,523		\$ 672,387

See Miller Exhibit A for rate

NON-RESIDENTIAL  
Energy Efficiency Programs

		Year 2014 Yr 3 LR	Rider 5 Original	
	Reference	Estimate	Estimate	Year 2014 Year 1
16	Non- Residential EE Program Cost	Barnes Exhibit 1 pg. 6, Line 24 * NC Alloc. Factor	16,206,358	14,807,710
17	Non-Residential EE Earned Utility Incentive	Barnes Exhibit 1 pg. 6, Line 24 * NC Alloc. Factor	5,782,942	7,804,219
18	Return on undercollection of Non-residential EE Program Costs	Miller Exhibit 2 page 11	58,887	58,887
19	Total EE Program Cost and Incentive Components	Line 16 + Line 17 + Line 18	21,989,300	22,670,816
20	Revenue-related taxes and regulatory fees factor	Miller Exhibit 2, pg. 13	1.017953	1.001352
21	Total Non-Residential EE Program Cost and Incentive Revenue Requireme	Line 19 * Line 20	22,384,074	23,066,512
22	Non-Residential Net Lost Revenues	Barnes Exhibit 2 pg. 2	1,831,641	3,054,030
23	Total Non-Residential EE Revenue Requirement	Line 21 + Line 22	24,215,715	26,120,541
24	Total Collected for Year 2014 (Rider 5)	Miller Exhibit 3, pg. 1, Line 18		22,574,937
25	Non-Residential EE Revenue Requirement True-up Amount	Line 23 - Line 24	6,094,150	3,545,604
26	Projected NC Residential Sales (kWh)	Miller Exhibit 6, pg. 2, Line 17	23,824,291,077	23,824,291,077
27	NC Non-Residential EE billing factor (Cents/kWh)	Line 25/Line 26*100	0.0256	0.0149

DSM Programs

Line	Reference	Year 2014 Yr 3 LR Estimate	Rider 5 Original		Year 2014 Year 1
			Estimate	True up	
28	Non-Residential DSM Program Cost	Barnes Exhibit 1, pg. 6 Line 25 * NC Alloc. Factor	15,046,160	(2,195,319)	12,850,841
29	Non-Residential DSM Earned Utility Incentive	Barnes Exhibit 1, pg. 6 Line 25 * NC Alloc. Factor	3,709,497	200,391	3,909,888
30	Return on overcollection of Non-residential DSM Program Costs	Miller Exhibit 2 page 12		(12,444)	(12,444)
31	Total Non-Residential DSM Program Cost and Incentive Components	Line 28 + Line 29 + Line 30	18,755,657	(2,007,373)	16,748,284
32	Revenue-related taxes and regulatory fees factor	Miller Exhibit 2, pg. 13	1.017953	1.001352	
33	Total Non-Residential DSM Revenue Requirement	Line 31 * Line 32	19,092,377	(2,010,087)	17,082,291
34	Total Revenue Collected for DSM Programs Year 2014	Miller Exhibit 3, pg. 1, Line 24			18,087,702
35	Non-Residential DSM Revenue Requirement True-up Amount	Line 33- Line 34			(1,005,411)
36	Projected NC Non-Residential Sales (kWh)	Miller Exhibit 6 pg. 2, Line 17			23,138,123,262
37	NC Non-Residential DSM billing factor	Line 35/Line 36*100			(0.0043)

<sup>1</sup> Revenue estimated to be collected in 2015 pertain to year 2 lost revenues. Year 2 lost revenues are not included in the lost revenue true-up for 2014. Therefore, the 2015 revenue is not included in this true-up. It will be trued up in Rider 8.

Miller Exhibit 2, page 6

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1073  
Estimated Year 2 Lost Revenues for Vintage Year 2015

## ***RESIDENTIAL***

Line

	Reference	2015
1 Residential Lost Revenues - Year 2	Barnes Exhibit 2 pg. 2 Line 36	\$ 4,071,955
2 Projected NC Residential Sales (kWh)	Miller Exhibit 6 pg. 2, Line 1	21,674,738,000
3 <b>NC Residential EE Billing factor (Cents/kWh)</b>	Line 1/Line 2*100	<b>0.0188</b>

## ***NON-RESIDENTIAL***

### ***Energy Efficiency Programs***

	Reference	2015
4 Non-Residential Net Lost Revenues - Year 2	Barnes Exhibit 2 pg. 2 Line 50	\$ 8,194,003
5 Projected NC Residential Sales (kWh)	Miller Exhibit 2 pg. 7, Line 19	23,753,678,227
6 <b>NC Non-Residential EE Billing Factor (Cents/kwh)</b>	Line 4/Line 5*100	<b>0.0345</b>

Miller Exhibit 2, page 7

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1073  
Estimated Program Costs, Earned Incentive and Lost Revenues for Vintage Year 2016

## RESIDENTIAL

Line	Reference	2016
1 Residential EE Program Cost	Barnes Exhibit 1, pg. 7 * NC Alloc. Factor	\$ 31,056,079
2 Residential EE Earned Utility Incentive	Barnes Exhibit 1, pg. 7 * NC Alloc. Factor	2,392,652
3 Total EE Program Cost and Incentive Components	Line 1 + Line 2	33,448,730
4 Residential DSM Program Cost	Barnes Exhibit 1, pg. 7 * NC Alloc. Factor	10,613,016
5 Residential DSM Earned Utility Incentive	Barnes Exhibit 1, pg. 7 * NC Alloc. Factor	2,887,418
6 Total DSM Program Cost and Incentive Components	Line 4 + Line 5	13,500,433
7 Total EE/DSM Program Cost and Incentive Components	Line 3 + Line 6	46,949,164
8 Revenue-related taxes and regulatory fees factor	Miller Exhibit 2, pg. 13	1.001352
9 Total EE/DSM Program Cost and Incentive Revenue Requirement	Line 7 * Line 8	47,012,639
10 Residential Net Lost Revenues	Barnes Exhibit 2 pg. 2 Line 61	11,873,767
11 <b>Total Residential EE Revenue Requirement</b>	<b>Line 9 + Line 10</b>	<b>\$ 58,886,406</b>

See Miller Exhibit 1  
for rate

## NON-RESIDENTIAL

### Energy Efficiency Programs

	Reference	2016
12 Non- Residential EE Program Cost	Barnes Exhibit 1, pg. 7 * NC Alloc. Factor	\$ 36,494,611
13 Non-Residential EE Earned Utility Incentive	Barnes Exhibit 1, pg. 7 * NC Alloc. Factor	10,105,721
14 Total EE Program Cost and Incentive Components	Line 12 + Line 13	46,600,331
15 Revenue-related taxes and regulatory fees factor	Miller Exhibit 2, pg. 13	1.001352
16 Total Non-Residential EE Program Cost and Incentive Revenue Requirements	Line 14 * Line 15	46,663,335
17 Non-Residential Net Lost Revenues	Barnes Exhibit 2 pg. 2 Line 75	4,745,315
18 Total Non-Residential EE Revenue Requirement	Line 16 + Line 17	\$ 51,408,650
19 Projected NC Residential Sales (kWh)	Miller Exhibit 6, pg. 2	23,753,678,227
20 <b>NC Non-Residential EE billing factor (Cents/kWh)</b>	<b>Line 18/Line 19*100</b>	<b>0.2164</b>

## DSM Programs

		2016
21 Non-Residential DSM Program Cost	Barnes Exhibit 1, pg. 7 * NC Alloc. Factor	\$ 12,855,910
22 Non-Residential DSM Earned Utility Incentive	Barnes Exhibit 1, pg. 7 * NC Alloc. Factor	3,497,628
23 Total Non-Residential DSM Program Cost and Incentive Components	Line 21 + Line 22	16,353,538
24 Revenue-related taxes and regulatory fees factor	Miller Exhibit 2, pg. 13	1.001352
25 Total Non-Residential DSM Revenue Requirement	Line 23 * Line 24	16,375,648
26 Projected NC Non-Residential Sales (kWh)	Miller Exhibit 6, pg. 2	23,082,735,561
27 <b>NC Non-Residential DSM billing factor</b>	<b>Line 25/Line 26*100</b>	<b>0.0709</b>

Miller Exhibit 2, page 8

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1073  
Estimated Interest Calculation - SAW Program

***NON-RESIDENTIAL  
DSM Programs***

**VINTAGE 3**

1 Vintage 3	Miller Exh 2 pg. 3 Line 29	(152,040)
		(152,040)
2 Annual interest rate	Same as used for fuel	10.00%
3 Monthly interest rate	Line 2/12	0.83%
4 Beginning interest incurred date	Mid-point of test period	7/1/2014
5 Ending date	Mid-point of rate period	6/30/2016
6 Total months to calculate interest		24
7 Total interest due	Line 1 * Line 3 * Line 6	(30,408)

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1073  
Estimated Return Calculation - Residential EE Programs Vintage 2014

		Residential EE Program Costs Incurred	NC Allocation %	NC Allocated EE Program Costs	NC Residential Revenue Collected(EEC2)	NC Residential EE Program Collection %	EE Program Costs Revenue Collected	(Over)/Under Collection
NC Residential EE		Miller Exhibit 5 pg. 6, Line 4						
					see calc. at right			
2014	January	2,345,126	72.9600473%	1,711,005	1,965,528	62.0990604%	(1,220,574)	490,431
2014	February	1,939,655	72.9600473%	1,415,174	4,790,497	62.0990604%	(2,974,854)	(1,559,680)
2014	March	2,388,597	72.9600473%	1,742,722	3,571,294	62.0990604%	(2,217,740)	(475,018)
2014	April	2,800,794	72.9600473%	2,043,460	2,996,350	62.0990604%	(1,860,705)	182,755
2014	May	3,504,706	72.9600473%	2,557,035	2,605,626	62.0990604%	(1,618,069)	938,966
2014	June	3,049,089	72.9600473%	2,224,617	3,281,724	62.0990604%	(2,037,920)	186,697
2014	July	4,165,240	72.9600473%	3,038,961	3,939,031	62.0990604%	(2,446,101)	592,859
2014	August	4,277,377	72.9600473%	3,120,776	3,417,322	62.0990604%	(2,122,125)	998,652
2014	September	2,815,581	72.9600473%	2,054,249	3,539,784	62.0990604%	(2,198,173)	(143,924)
2014	October	3,790,918	72.9600473%	2,765,856	2,460,025	62.0990604%	(1,527,652)	1,238,204
2014	November	3,405,295	72.9600473%	2,484,505	2,448,958	62.0990604%	(1,520,780)	963,725
2014	December	3,772,108	72.9600473%	2,752,132	3,980,410	62.0990604%	(2,471,797)	280,335
2015	January	0	72.9600473%	-	2,517,177	62.0990604%	(1,563,143)	(1,563,143)
		38,254,486		27,910,491	41,513,726			

EE Program Costs	27,910,490
EE Revenue Requirement	44,945,109
% Revenue related to Program Costs	62%

		Cumulative (Over)/Under Recovery	Deferred Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest
NC Residential EE		2014 tax rate			6.93%				
2014	January	490,431	0.383471	188,066	188,066	302,365	0.005775	873	873
2014	February	(1,069,250)	0.383471	(598,092)	(410,026)	(659,224)	0.005775	(1,030)	(157)
2014	March	(1,544,268)	0.383471	(182,156)	(592,182)	(952,086)	0.005775	(4,653)	(4,810)
2014	April	(1,361,513)	0.383471	70,081	(522,101)	(839,412)	0.005775	(5,173)	(9,983)
2014	May	(422,547)	0.383471	360,066	(162,034)	(260,512)	0.005775	(3,176)	(13,159)
2014	June	(235,850)	0.383471	71,593	(90,442)	(145,408)	0.005775	(1,172)	(14,331)
2014	July	357,010	0.383471	227,344	136,903	220,107	0.005775	216	(14,116)
2014	August	1,355,661	0.383471	382,954	519,857	835,804	0.005775	3,049	(11,067)
2014	September	1,211,738	0.383471	(55,191)	464,666	747,071	0.005775	4,571	(6,496)
2014	October	2,449,941	0.383471	474,815	939,481	1,510,460	0.005775	6,519	23
2014	November	3,413,666	0.383471	369,560	1,309,042	2,104,624	0.005775	10,439	10,462
2014	December	3,694,001	0.383471	107,500	1,416,542	2,277,459	0.005775	12,654	23,115
2015	January	2,130,857	0.383471	(599,420)	817,122	1,313,735	0.005775	10,370	33,485
								33,485	



Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1073  
Estimated Return Calculation - Residential DSM Programs Vintage 2014

		Total System NC DSM Program Costs Incurred	NC Residential DSM Allocation %	NC Allocated DSM Residential Program Costs	NC Residential Revenue Collected(EEC2)	NC Residential DSM Program Collection %	DSM Program Costs Revenue Collected	(Over)/Under Collection
NC Residential DSM		Miller Exhibit 5, pg 6 Line 9						
		See calc. at right						
2014	January	1,853,709	34.0209980%	630,650	801,545	75.0945957%	(601,917)	28,733
2014	February	1,977,838	34.0209980%	672,880	1,953,572	75.0945957%	(1,467,027)	(794,147)
2014	March	2,263,839	34.0209980%	770,180	1,456,379	75.0945957%	(1,093,662)	(323,481)
2014	April	2,327,907	34.0209980%	791,977	1,221,916	75.0945957%	(917,593)	(125,616)
2014	May	2,953,411	34.0209980%	1,004,780	1,062,578	75.0945957%	(797,939)	206,841
2014	June	2,326,109	34.0209980%	791,366	1,338,292	75.0945957%	(1,004,985)	(213,619)
2014	July	3,521,875	34.0209980%	1,198,177	1,597,016	75.0945957%	(1,199,273)	(1,096)
2014	August	3,245,158	34.0209980%	1,104,035	1,385,497	75.0945957%	(1,040,433)	63,602
2014	September	3,836,775	34.0209980%	1,305,309	1,435,148	75.0945957%	(1,077,718)	227,591
2014	October	3,227,894	34.0209980%	1,098,162	997,377	75.0945957%	(748,976)	349,186
2014	November	2,015,259	34.0209980%	685,611	992,890	75.0945957%	(745,607)	(59,996)
2014	December	1,633,412	34.0209980%	555,703	1,613,792	75.0945957%	(1,211,871)	(656,167)
2015	January		34.0209980%	-	1,020,548	75.0945957%	(766,377)	(766,377)
		31,183,185		10,608,831	16,876,548			

DSM Program Costs	10,608,831
DSM Revenue Requirement	14,127,289
% Revenue related to Program Costs	75%

		Cumulative (Over)/Under Recovery	Deferred Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest
NC Residential DSM									
		2014 tax rate				6.93%			
2014	January	28,733	0.383471	11,018	11,018	17,715	0.005775	51	51
2014	February	(765,414)	0.383471	(304,532)	(293,514)	(471,900)	0.005775	(1,311)	(1,260)
2014	March	(1,088,895)	0.383471	(124,046)	(417,560)	(671,335)	0.005775	(3,301)	(4,561)
2014	April	(1,214,510)	0.383471	(48,170)	(465,729)	(748,781)	0.005775	(4,101)	(8,662)
2014	May	(1,007,669)	0.383471	79,318	(386,412)	(621,257)	0.005775	(3,956)	(12,618)
2014	June	(1,221,288)	0.383471	(81,917)	(468,329)	(752,959)	0.005775	(3,968)	(16,586)
2014	July	(1,222,384)	0.383471	(420)	(468,749)	(753,635)	0.005775	(4,350)	(20,936)
2014	August	(1,158,782)	0.383471	24,389	(444,359)	(714,423)	0.005775	(4,239)	(25,175)
2014	September	(931,191)	0.383471	87,274	(357,085)	(574,106)	0.005775	(3,721)	(28,896)
2014	October	(582,005)	0.383471	133,903	(223,182)	(358,823)	0.005775	(2,694)	(31,590)
2014	November	(642,001)	0.383471	(23,007)	(246,189)	(395,812)	0.005775	(2,179)	(33,769)
2014	December	(1,298,168)	0.383471	(251,621)	(497,810)	(800,358)	0.005775	(3,454)	(37,223)
2015	January	(2,064,545)	0.383471	(293,883)	(791,693)	(1,272,852)	0.005775	(5,986)	(43,209)
								(43,209)	

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1073  
Estimated Return Calculation - Non- Residential EE Programs Vintage 2014

NC Non- Residential EE		Non-Residential EE Program Costs	NC Allocation %  Miller Exhibit 5. pg 6, Line 4	NC Allocated EE	NC Residential	NC Non- Residential EE	Non-Residential	(Over)/Under Collection
		Incurred		Program Costs	Revenue Collected(EEC14)	Program Collection %	EE Program Costs Revenue Collected	
		See calc. at right						
2014	January	1,402,202	72.9600473%	1,023,047	873,873	56.8181711%	(496,519)	526,529
2014	February	787,200	72.9600473%	574,342	1,906,629	56.8181711%	(1,083,312)	(508,970)
2014	March	2,047,090	72.9600473%	1,493,558	1,730,198	56.8181711%	(983,067)	510,491
2014	April	1,881,253	72.9600473%	1,372,563	1,818,402	56.8181711%	(1,033,183)	339,380
2014	May	1,352,150	72.9600473%	986,529	1,841,327	56.8181711%	(1,046,209)	(59,679)
2014	June	3,031,236	72.9600473%	2,211,591	2,078,943	56.8181711%	(1,181,217)	1,030,374
2014	July	1,652,175	72.9600473%	1,205,428	2,112,332	56.8181711%	(1,200,188)	5,239
2014	August	666,430	72.9600473%	486,228	2,059,199	56.8181711%	(1,169,999)	(683,771)
2014	September	2,603,310	72.9600473%	1,899,376	2,121,927	56.8181711%	(1,205,640)	693,736
2014	October	1,387,748	72.9600473%	1,012,502	1,841,200	56.8181711%	(1,046,136)	(33,634)
2014	November	1,478,658	72.9600473%	1,078,830	1,706,943	56.8181711%	(969,854)	108,975
2014	December	2,006,192	72.9600473%	1,463,718	1,819,475	56.8181711%	(1,033,793)	429,926
				-	664,487	56.8181711%	(377,550)	(377,550)
		20,295,644		14,807,712	22,574,937			

Non-Res EE Program Costs	14,807,710
Non-Res EE Revenue Requirement	26,061,575
% Revenue related to Program Costs	57%

NC Non-Residential EE		Cumulative (Over)/Under Recovery	Deferred Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest
		2014 tax rate		6.93%					
2014	January	526,529	0.383471	201,908.46	201,908	324,620	0.005775	937	937
2014	February	17,558	0.383471	(195,175.35)	6,733	10,825	0.005775	969	1,906
2014	March	528,049	0.383471	195,758.43	202,492	325,558	0.005775	971	2,877
2014	April	867,429	0.383471	130,142.30	332,634	534,795	0.005775	2,484	5,362
2014	May	807,750	0.383471	(22,885.31)	309,749	498,001	0.005775	2,982	8,344
2014	June	1,838,124	0.383471	395,118.54	704,867	1,133,256	0.005775	4,710	13,054
2014	July	1,843,363	0.383471	2,009.17	706,876	1,136,487	0.005775	6,554	19,608
2014	August	1,159,592	0.383471	(262,206.49)	444,670	714,922	0.005775	5,346	24,954
2014	September	1,853,328	0.383471	266,027.70	710,697	1,142,630	0.005775	5,364	30,317
2014	October	1,819,694	0.383471	(12,897.69)	697,800	1,121,894	0.005775	6,539	36,856
2014	November	1,928,669	0.383471	41,788.93	739,589	1,189,080	0.005775	6,673	43,529
2014	December	2,358,595	0.383471	164,864.02	904,453	1,454,142	0.005775	7,632	51,162
		1,981,045	0.383471	(144,779.31)	759,673	1,221,372	0.005775	7,726	58,887



Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1073  
Estimated Return Calculation -Non - Residential DSM Programs Vintage 2014

		Total System NC DSM Program Costs Incurred	NC Non- Residential DSM Allocation %	NC Allocated DSM Non-Residential Program Costs	Incentives Earned & GRT remitted (Allocated based on WA of Program Costs Incurred)	Total DSM Revenue Requirement	NC Non-Residential DSM Revenue Collected(DS14)	NC Non-Residential DSM Program Collection %	Non-Residential DSM Program Costs Revenue Collected	(Over)/Under Collection
NC Non- Residential DSM										
			See Miller Exhibit 5 pg. 6, Line 10		calculated interest on entire balance due to over- collection in total			100% used due to over-collection of entire vintage		
2014	January	1,853,709	41.2108021%	763,928	252,283	1,016,211	715,425	100.0000000%	(715,425)	300,786
2014	February	1,977,838	41.2108021%	815,083	269,176	1,084,259	1,545,880	100.0000000%	(1,545,880)	(461,622)
2014	March	2,263,839	41.2108021%	932,946	308,100	1,241,046	1,379,174	100.0000000%	(1,379,174)	(138,128)
2014	April	2,327,907	41.2108021%	959,349	316,819	1,276,168	1,475,418	100.0000000%	(1,475,418)	(199,250)
2014	May	2,953,411	41.2108021%	1,217,124	401,948	1,619,072	1,483,279	100.0000000%	(1,483,279)	135,793
2014	June	2,326,109	41.2108021%	958,608	316,575	1,275,183	1,664,945	100.0000000%	(1,664,945)	(389,762)
2014	July	3,521,875	41.2108021%	1,451,393	479,314	1,930,707	1,716,762	100.0000000%	(1,716,762)	213,944
2014	August	3,245,158	41.2108021%	1,337,356	441,654	1,779,009	1,659,220	100.0000000%	(1,659,220)	119,789
2014	September	3,836,775	41.2108021%	1,581,166	522,170	2,103,336	1,699,354	100.0000000%	(1,699,354)	403,982
2014	October	3,227,894	41.2108021%	1,330,241	439,304	1,769,545	1,492,291	100.0000000%	(1,492,291)	277,254
2014	November	2,015,259	41.2108021%	830,504	274,269	1,104,773	1,335,834	100.0000000%	(1,335,834)	(231,061)
2014	December	1,633,412	41.2108021%	673,142	222,301	895,443	1,459,103	100.0000000%	(1,459,103)	(563,659)
2015	January	-	41.2108021%	-	-	-	461,016	100.0000000%	(461,016)	(461,016)
		31,183,185		12,850,841	4,243,911	17,094,752	18,087,702			

		Cumulative (Over)/Under Recovery	Deferred Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest
NC Residential EE									
			2014 tax rate				6.93%		
2014	January	300,786	0.380225	114,366	114,366	186,420	0.005775	538	538
2014	February	(160,835)	0.380225	(175,520)	(61,154)	(99,682)	0.005775	250	789
2014	March	(298,963)	0.380225	(52,520)	(113,673)	(185,290)	0.005775	(823)	(34)
2014	April	(498,214)	0.380225	(75,760)	(189,433)	(308,780)	0.005775	(1,427)	(1,461)
2014	May	(362,421)	0.380225	51,632	(137,801)	(224,619)	0.005775	(1,540)	(3,001)
2014	June	(752,183)	0.380225	(148,197)	(285,999)	(466,184)	0.005775	(1,995)	(4,996)
2014	July	(538,238)	0.380225	81,347	(204,652)	(333,587)	0.005775	(2,309)	(7,305)
2014	August	(418,449)	0.380225	45,547	(159,105)	(259,344)	0.005775	(1,712)	(9,017)
2014	September	(14,467)	0.380225	153,604	(5,501)	(8,967)	0.005775	(775)	(9,792)
2014	October	262,787	0.380225	105,419	99,918	162,869	0.005775	444	(9,347)
2014	November	31,726	0.380225	(87,855)	12,063	19,663	0.005775	527	(8,820)
2014	December	(531,933)	0.380225	(214,317)	(202,254)	(329,679)	0.005775	(895)	(9,716)
2015	January	(992,950)	0.380225	(175,290)	(377,544)	(615,406)	0.005775	(2,729)	(12,444)
								(12,444)	

Miller Exhibit 2, page 13

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1073  
Gross Receipts Tax Years 2009-2016

	<u>Year</u>		<u>GRT Rate In Effect</u>
Rider 1	2009		1.034554
Rider 1	2010		1.034554
Rider 2	2011		1.034554
Rider 3	2012		1.034554
Rider 4	2013		1.034554
	2014	Jan - June	1.034554
		July - Dec	1.001352
Rider 5	2014	Weighted Average	1.017953
Rider 6	2015		1.001352
Rider 7	2016		1.001352

Miller Exhibit 3, page 1

Duke Energy Carolinas, LLC  
DSM/EE Revenues Collected from Riders 1-6 (By Vintage)  
Docket Number E-7, Sub 1073  
For Vintages 1- 4 and Year 2014 True-Up Calculations

			Actual 2010 Rider 1	Actual 2011 Rider 2	Actual 2012 Rider 3	Actual 2013 Rider 4	Actual 2014 Rider 5	Estimate 2015 Rider 6 <sup>(1)</sup>	Total
<b>Residential</b>									
Line		Vintage							
1	EE	v1	\$ 25,916,921	\$ 6,366,243	\$ 17,575,779	\$ 929,553	\$ 674,570	\$ 2,884,169	\$ 54,347,236
2		v2		22,641,166	7,680,225	10,307,713	7,750,897	17,156,210	65,536,210
3		v3			8,610,393	2,933,257	21,501,477	16,970,485	50,015,612
4		v4				7,291,829	3,131,859	27,904,781	38,328,469
5		Year 2014					41,513,726	3,871,360	45,385,085
6		Year 2015						53,202,985	53,202,985
7	DSM	v1	6,461,100		2,357,720	(413,135)		(210,578)	8,195,107
8		v2		7,259,507		1,260,061		(1,200,218)	7,319,349
9		v3			10,713,375	-	(2,354,078)	1,466,599	9,825,897
10		v4				11,526,460		413,896	11,940,356
11		Year 2014					16,876,548		16,876,548
12		Year 2015						5,658,797	5,658,797
13	<b>Total Residential</b>		<b>\$ 32,378,022</b>	<b>\$ 36,266,916</b>	<b>\$ 46,937,492</b>	<b>\$ 33,835,738</b>	<b>\$ 89,094,999</b>	<b>\$ 128,118,487</b>	<b>\$ 366,631,653</b>
<b>Non-Residential</b>									
14	EE	v1	\$ 7,688,412	\$ 860,011	\$ 6,038,079	\$ 3,812,310	\$ (289,351)	\$ -	\$ 18,109,461
15		v2		7,165,813	1,039,274	12,137,871	1,415,164	2,349,137	24,107,260
16		v3			11,394,699	1,717,616	17,828,520	5,928,564	36,869,399
17		v4				19,795,122	3,107,562	14,485,563	37,388,248
18		Year 2014					22,574,937	4,760,481	27,335,418
19		Year 2015					-	25,545,057	25,545,057
20	DSM	v1	5,118,264		4,994,566	(311,608)		(65,988)	9,735,234
21		v2		7,594,483		3,378,237	-	(44,923)	10,927,797
22		v3			12,967,453	-	(1,109,322)	1,288,862	13,146,993
23		v4				14,182,324	-	681,813	14,864,137
24		Year 2014					18,087,702		18,087,702
25		Year 2015						19,453,552	19,453,552
26	<b>Total Non-Residential</b>		<b>\$ 12,806,676</b>	<b>\$ 15,620,307</b>	<b>\$ 36,434,070</b>	<b>\$ 54,711,872</b>	<b>\$ 61,615,213</b>	<b>\$ 74,382,118</b>	<b>\$ 255,570,257</b>
27	<b>Total Revenue</b>		<b>\$ 45,184,698</b>	<b>\$ 51,887,223</b>	<b>\$ 83,371,563</b>	<b>\$ 88,547,610</b>	<b>\$ 150,710,212</b>	<b>\$ 202,500,605</b>	<b>\$ 622,201,910</b>

<sup>(1)</sup> Rider 6 estimates based on the revised estimated forecast. See Miller Exhibit 3 page 3.

Duke Energy Carolinas, LLC  
DSM/EE Revenues Collected from Riders 1-6 (By Vintage)  
Docket Number E-7, Sub 1073  
Revenue by Type for Riders 1-5 Actuals and Rider 6 estimates (SAW Program only)

			Actual 2010 Rider 1	Actual 2011 Rider 2	Actual 2012 Rider 3	Actual 2013 Rider 4	Actual 2014 Rider 5	Estimate 2015 Rider 6 <sup>(1)</sup>	Total
<b>Residential</b>									
<b>Line</b>	<b>Vintage</b>								
1	EE/DSM-Avoided Costs	v1	\$ 23,845,842	\$ -	\$ 21,750,975	\$ (6,891,415)	\$ 837,024	\$ (1,034,124)	\$ 38,508,303
2		v2	-	22,938,621	-	12,315,553	11,742	(9,643,903)	25,622,013
3		v3	-	-	18,077,050	-	10,257,628	7,109,157	35,443,836
4		v4	-	-	-	17,612,692	-	11,368,427	28,981,119
5	Lost Revenue	v1	8,532,180	6,366,243	(1,817,476)	7,407,834	(162,454)	3,707,715	24,034,040
6		v2	-	6,962,052	7,680,225	(747,779)	7,739,154	25,599,895	47,233,547
7		v3	-	-	1,246,718	2,933,257	8,889,771	11,327,927	24,397,673
8		v4	-	-	-	1,205,598	3,131,859	16,950,250	21,287,706
9	<b>Total Residential</b>		<b>\$ 32,378,022</b>	<b>\$ 36,266,916</b>	<b>\$ 46,937,492</b>	<b>\$ 33,835,738</b>	<b>\$ 30,704,725</b>	<b>\$ 65,385,345</b>	<b>\$ 245,508,237</b>
<b>Non-Residential</b>									
10	EE Avoided Costs	v1	\$ 6,572,003	\$ -	\$ 7,233,409	\$ 3,066,725	\$ (348,179)	\$ -	\$ 16,523,959
11		v2	-	6,225,978	-	11,932,378	-	(983,590)	17,174,766
12		v3	-	-	11,328,823	-	14,441,251	2,922,651	28,692,725
13		v4	-	-	-	19,170,692	-	7,704,941	26,875,632
14	DSM Avoided Costs	v1	5,118,264	-	4,994,566	(311,608)	-	(65,988)	9,735,234
15		v2	-	7,594,483	-	3,378,237	-	(44,923)	10,927,797
16		v3	-	-	12,967,453	-	(1,109,322)	1,288,862	13,146,993
17		v4	-	-	-	14,182,324	-	681,813	14,864,137
18	Lost Revenue	v1	1,116,409	860,011	(1,195,330)	745,585	58,828	-	1,585,502
19		v2	-	939,835	1,039,274	205,493	1,415,164	3,332,727	6,932,493
20		v3	-	-	65,876	1,717,616	3,387,269	3,005,913	8,176,674
21		v4	-	-	-	624,430	3,107,562	6,780,623	10,512,615
22	<b>Total Non-Residential</b>		<b>\$ 12,806,676</b>	<b>\$ 15,620,307</b>	<b>\$ 36,434,070</b>	<b>\$ 54,711,872</b>	<b>\$ 20,952,574</b>	<b>\$ 24,623,028</b>	<b>\$ 165,148,528</b>
23	<b>Total Revenue</b>		<b>\$ 45,184,698</b>	<b>\$ 51,887,223</b>	<b>\$ 83,371,563</b>	<b>\$ 88,547,610</b>	<b>\$ 51,657,299</b>	<b>\$ 90,008,373</b>	<b>\$ 410,656,765</b>

<sup>(1)</sup> Rider 6 estimates based on the revised estimated forecast. See Miller Exhibit 3 page 3.

Duke Energy Carolinas, LLC  
DSM/EE Cost Recovery Rider 7  
Docket Number E-7 Sub 1073  
Revised Estimated Revenues 2015

Miller Exhibit 3, page 3

**Residential Billing Factors for Rider 6 with updated 2015 forecast**

Line		
1	Rate for Vintage 1 True-Up	(WA of rate in Rider 6, McGee Exhibit 1) 0.0125
2	Updated 2015 Forecast	Miller Exhibit 6 pg. 1, Line 1 21,388,729,000
3	Estimated Revenue Vintage 1 True Up	(Line 1*Line 2)/100 <b>2,673,591</b>
4	Rate for Vintage 2 True-Up	(WA of rate in Rider 6, McGee Exhibit 1) 0.0746
5	Updated 2015 Forecast	Miller Exhibit 6 pg. 1, Line 1 21,388,729,000
6	Estimated Revenue Vintage 2 True Up	(Line 4*Line 5)/100 <b>15,955,992</b>
7	Rate for Vintage 3 True-Up	(WA of rate in Rider 6, McGee Exhibit 1) 0.0786
8	Updated 2015 Forecast	Miller Exhibit 6 pg. 1, Line 1 21,388,729,000
9	Estimated Revenue Vintage 3 True Up	(Line 7*Line 8)/100 <b>16,811,541</b>
10	Rate for Vintage 4 True-Up	(WA of rate in Rider 6, McGee Exhibit 1) 0.0984
11	Updated 2015 Forecast	Miller Exhibit 6 pg. 1, Line 1 21,388,729,000
12	Estimated Revenue Vintage 4 True Up	(Line 10*Line 11)/100 <b>21,046,509</b>
13	Rate for Vintage 3 Prospective Component	(WA of rate in Rider 6, McGee Exhibit 1) 0.0076
14	Updated 2015 Forecast	Miller Exhibit 6 pg. 1, Line 1 21,388,729,000
15	Estimated Revenue Vintage 3 True Up	(Line 13*Line 14)/100 <b>1,625,543</b>
16	Rate For Vintage 4 Prospective Component	(WA of rate in Rider 6, McGee Exhibit 1) 0.0340
17	Updated 2015 Forecast	Miller Exhibit 6 pg. 1, Line 1 21,388,729,000
18	Estimated Revenue Vintage 4 True Up	(Line 16*Line 17)/100 <b>7,272,168</b>
19	Rate for Year 2014 Prospective Component	(WA of rate in Rider 6, McGee Exhibit 1) 0.0181
20	Updated 2015 Forecast	Miller Exhibit 6, pg. 2 21,388,729,000
21	Estimated Revenue Vintage Year 2014 True Up	(Line 19*Line 20)/100 <b>3,871,360</b>
22	Rate For Year 2015 Prospective Component	(WA of rate in Rider 6, McGee Exhibit 1) 0.2752
23	Updated 2015 Forecast	Miller Exhibit 6, pg. 2 21,388,729,000
24	Estimated Revenue Vintage Year 2015 True Up	(Line 22*Line 23)/100 <b>58,861,782</b>

Duke Energy Carolinas, LLC  
DSM/EE Cost Recovery Rider 7  
Docket Number E-7 Sub 1073  
Revised Estimated Revenues 2015

Miller Exhibit 3, page 4

Revised Non-Residential Billing Factors for Rider 6 with updated forecast

Line			
1	Rate for Vintage 1 EE True-up (EMF) Participants	Rider 6, McGee Exhibit 1	-
2	Updated 2015 Forecast	Miller Exhibit 6, pg. 1, Line 31	22,483,765,776
3	SAW EE Estimated Revenue Vintage 1 EMF Non-Residential Rider EE	Line 1*Line 2 / 100	-
4	Rate for Vintage 1 DSM True-up (EMF) Participants	Rider 6, McGee Exhibit 1	(0.0003)
5	Updated 2015 Forecast	Miller Exhibit 6, pg. 1, Line 31	21,995,904,238
6	SAW DSM Estimated Revenue Vintage 1 EMF Non-Residential Rider EE	Line 4*Line 5 / 100	\$ (65,988)
7	Rate for Vintage 2 EE True-up (EMF) Participants	Rider 6, McGee Exhibit 1	0.0103
8	Updated 2015 Forecast	Miller Exhibit 6, pg. 1, Line 31	22,807,156,187
9	SAW EE Estimated Revenue Vintage 2 EMF Non-Residential Rider EE	Line 7*Line 8 / 100	\$ 2,349,137
10	Rate for Vintage 2 DSM True-up (EMF) Participants	Rider 6, McGee Exhibit 1	(0.0002)
11	Updated 2015 Forecast	Miller Exhibit 6, pg. 1, Line 31	22,461,631,628
12	SAW DSM Estimated Revenue Vintage 2 EMF Non-Residential Rider EE	Line 10*Line 11 / 100	\$ (44,923)
13	Rate for Vintage 3 EE True-up (EMF) Participants	Rider 6, McGee Exhibit 1	0.0212
14	Updated 2015 Forecast	Miller Exhibit 6, pg. 1, Line 31	23,068,340,761
15	SAW EE Estimated Revenue Vintage 3 EMF Non-Residential Rider EE	Line 13*Line 14 / 100	\$ 4,890,488
16	Rate for Vintage 3 DSM True-up (EMF) Participants	Rider 6, McGee Exhibit 1	0.0057
17	Updated 2015 Forecast	Miller Exhibit 6, pg. 1, Line 31	22,611,621,941
18	SAW DSM Estimated Revenue Vintage 3 EMF Non-Residential Rider EE	Line 16*Line 17 / 100	\$ 1,288,862
19	Rate for Vintage 4 EE True-up (EMF) Participants	Rider 6, McGee Exhibit 1	0.0400
20	Updated 2015 Forecast	Miller Exhibit 6, pg. 1, Line 31	23,477,412,232
21	SAW EE Estimated Revenue Vintage 4 EMF Non-Residential Rider EE	Line 19*Line 20 / 100	\$ 9,390,965
22	Rate for Vintage 4 DSM True-up (EMF) Participants	Rider 6, McGee Exhibit 1	0.0030
23	Updated 2015 Forecast	Miller Exhibit 6, pg. 1, Line 31	22,727,095,176
24	SAW DSM Estimated Revenue Vintage 4 EMF Non-Residential Rider EE	Line 22*Line 23 / 100	\$ 681,813
25	Rate for Vintage 3 EE Prospective Participants	Rider 6, McGee Exhibit 1	0.0045
26	Updated 2015 Forecast	Miller Exhibit 6, pg. 1, Line 31	23,068,340,761
27	SAW EE Estimated Revenue Vintage 3 EE Prospective Component for Non-Residential Rider EE	Line 25*Line 26 / 100	\$ 1,038,075
28	Rate for Vintage 4 EE Prospective Participants	Rider 6, McGee Exhibit 1	0.0217
29	Updated 2015 Forecast	Miller Exhibit 6, pg. 1, Line 31	23,477,412,232
30	SAW EE Estimated Revenue Vintage 4 EE Prospective Component for Non-Residential Rider EE	Line 28*Line 29 / 100	\$ 5,094,598
31	Rate for Year 2014 EE Prospective Participants	Rider 6, McGee Exhibit 1	0.0204
32	Updated 2015 Forecast	Miller Exhibit 6, pg. 2, Line 25	23,335,692,077
33	EE Estimated Revenue Vintage Year 2014 EE Prospective Component for Non-Residential Rider EE	Line 31*Line 32 / 100	\$ 4,760,481
34	Rate for Vintage 2015 EE Prospective Participants	Rider 6, McGee Exhibit 1	0.1098
35	Updated 2015 Forecast	Miller Exhibit 6, pg. 2, Line 25	23,265,079,227
36	EE Estimated Revenue Vintage Year 2014 EE Prospective Component for Non-Residential Rider EE	Line 37*Line 35 / 100	\$ 25,545,057
37	Rate for Vintage 2015 DSM Prospective Participants	Rider 6, McGee Exhibit 1	0.0861
38	Updated 2015 Forecast	Miller Exhibit 6, pg. 2, Line 25	22,594,136,561
39	DSM Estimated Revenue Vintage Year 2015 Prospective Component for Non-Residential Rider EE	Line 37*Line 38 / 100	\$ 19,453,552
			74,382,118



Duke Energy Carolinas, LLC  
Docket Number E-7, Sub 1073  
DSM/EE Earnings Cap Calculation for the Period June 1, 2009 to December 31, 2013

			2009-2010	2011	2012	2013		
			Vintage 1	Vintage 2	Vintage 3	Vintage 4	Total	
			a	b	c	d	e = sum(a-d)	
Line	Total for EE		50%					
1	AC Revenues-50%	Barnes Exhibit 1	\$ 54,046,415	\$ 53,060,687	\$ 55,694,675	\$ 49,007,754	\$ 211,809,532	
2	Program Costs	Barnes Exhibit 3	35,112,011	32,010,151	36,593,077	35,401,041	139,116,280	
3	Income Before Taxes	Line 1 - Line 2	18,934,404	21,050,536	19,101,598	13,606,713	72,693,252	
4	Income Tax Rate		0.391760	0.391713	0.391373	0.391373		
5	Income Taxes	Line 3 * Line 4	7,417,742	8,245,769	7,475,850	5,325,300	28,464,661	
6	Net Income	Line 3 - Line 5	\$ 11,516,662	\$ 12,804,768	\$ 11,625,749	\$ 8,281,413	\$ 44,228,591	
Total for DSM Programs			75%					
7	AC Revenues-75%	Barnes Exhibit 1	\$ 20,997,871	\$ 22,415,245	\$ 27,146,629	\$ 30,694,489	\$ 101,254,234	
8	Program Costs	Barnes Exhibit 3	15,278,329	20,974,142	20,862,044	20,654,964	77,769,479	
9	Income Before Taxes	Line 7 - Line 8	5,719,543	1,441,103	6,284,584	10,039,525	23,484,755	
10	Income Tax Rate		0.391760	0.391713	0.391373	0.391373		
11	Income Taxes	Line 9 * Line 10	2,240,688	564,499	2,459,617	3,929,199	9,194,002	
12	Net Income	Line 9 - Line 11	\$ 3,478,855	\$ 876,604	\$ 3,824,968	\$ 6,110,326	\$ 14,290,752	
Total for SAW Programs Adjusted for DSM Cap								
13	AC Revenues	Line 1 + Line 7	\$ 75,044,287	\$ 75,475,933	\$ 82,841,304	\$ 79,702,242	\$ 313,063,766	
14	Program Costs	Line 2 + Line 8	50,390,340	52,984,294	57,455,121	56,056,005	216,885,759	
15	Income Before Taxes	Line 13 - Line 14	24,653,947	22,491,639	25,386,183	23,646,238	96,178,006	
16	Income Tax Rate		0.391760	0.391713	0.391373	0.391373	0.391552	
17	Income Taxes	Line 15 * Line 16	9,658,430	8,810,267	9,935,467	9,254,499	37,658,663	
18	Net Income	Line 15 - Line 17	\$ 14,995,516	\$ 13,681,372	\$ 15,450,716	\$ 14,391,739	\$ 58,519,343	
19	Allowed After-tax Return on Program Cost Investment	Line 14 * 15%					32,532,864	
20	Allowed Pre-tax Return on Program Cost Investment	Line 19 /(1-Line 16)					53,468,577	
21	Avoided Cost Revenues for the SAW program	Line 13					\$ 313,063,766	
22	Total Program Cost Investment + Allowed Pre-tax Return	Line 14 + Line 20					270,354,336	
23	Excess Pre-tax Return = Cap Adjustment	Line 21 - Line 22					\$ 42,709,430	
24	Total Avoided Costs Allowed to Collect	Minimum of Line 21 and Line 22					\$ 270,354,336	
25	Avoided Cost Revenue Collected (R1-5 actuals and R6 estimates)-before GRT	Miller Exhibit 3 pg. 2 / (1.001352)					266,136,697	
26	Amount to be collected (returned) from (to) Customers	Line 24 - Line 25					\$ 4,217,639	
Allocation of Cap Adjustment (Line 23) to Residential/Non-Residential and Vintage								
27	Residential Avoided Cost Revenue Collections-Before GRT	Miller Exhibit 3 pg. 2/1.001352	\$ 38,456,310	\$ 25,587,418	\$ 35,395,980	\$ 28,941,989	\$ 128,381,698	
28	Non-Residential EE Avoided Cost Revenue Collections-Before GRT	Miller Exhibit 3 pg. 2/1.001352	16,501,648	17,151,577	28,653,985	26,839,346	89,146,556	
29	Non-Residential DSM Avoided Cost Revenue Collections-Before GRT	Miller Exhibit 3 pg. 2/1.001352	9,722,090	10,913,043	13,129,243	14,844,068	48,608,443	
30	Total Revenue Collections		\$ 64,680,048	\$ 53,652,038	\$ 77,179,208	\$ 70,625,403	\$ 266,136,697	
Relative Percentage:								
31	Residential Avoided Cost Revenue	Line 27 / Line 30	59%	48%	46%	41%	48%	
32	Non-Residential EE Avoided Cost Revenue	Line 28 / Line 30	26%	32%	37%	38%	33%	
33	Non-Residential DSM Avoided Cost Revenue	Line 29 / Line 30	15%	20%	17%	21%	18%	
34	Total Revenue	Line 30 Vintage Total / Line 30 Total Rev Collections	24%	20%	29%	27%	100%	
Cap Adjustment Allocation:								
35	Residential	Line 31 * Line 38 Total	\$ 6,171,442	\$ 4,106,251	\$ 5,680,322	\$ 4,644,590	\$ 20,602,605	
36	Non-Residential EE	Line 32 * Line 38 Total	2,648,173	2,752,473	4,598,371	4,307,159	14,306,177	
37	Non-Residential DSM	Line 33 * Line 38 Total	1,560,194	1,751,317	2,106,972	2,382,166	7,800,649	
38	Total Cap Adjustment	Line 34 * Line 23	\$ 10,379,809	\$ 8,610,041	\$ 12,385,665	\$ 11,333,915	\$ 42,709,430	

Miller Exhibit 5, page 1

Duke Energy Carolinas, LLC  
 EE/DSM Vintage 1 True Up for the Period June 1, 2009 to December 31, 2009  
 Docket Number E-7, Sub 1073  
 Allocation Factors

			MWH		
			<hr/>		
Line	<b>SAW Sales Allocator</b>				
1	NC Retail MWH Sales Allocation	Company Records	53,842,194		
2	SC Retail MWH Sales Allocation	Company Records	19,906,425		
3	Total Retail	Line 1 + Line 2	<hr/>	73,748,619	
<b>Allocation 1 to state based on kWh sales</b>					
4	NC Retail	Line 1 / Line 3		<b>73.0077318%</b>	
<b>Demand Allocators</b>					
			NC	SC	Total
			<hr/>		
5	Residential	Company Records	5,281,284	1,692,049	6,973,333
6	Non Residential	Company Records	6,218,623	2,386,563	8,605,186
7	Total	Line 5 + Line 6	<hr/>	11,499,907	4,078,612
				15,578,519	
<b>Allocation 2 to state based on peak demand</b>					
8	NC Retail	Line 7, NC / Line 7 Total		<b>73.8190004%</b>	
<b>Allocation 3 NC res vs non-res Peak Demand to retail system peak</b>					
9	NC Residential	Line 5 NC/ Line 7 Total		<b>33.9010659%</b>	
10	NC Non-residential	Line 6 NC/ Line 7 Total		<b>39.9179344%</b>	



Miller Exhibit 5, page 2

Duke Energy Carolinas, LLC  
 EE/DSM Vintage 1 True Up for the Period January 1, 2010 to December 31, 2010  
 Docket Number E-7, Sub 1073  
 Allocation Factors

			MWH		
			<hr/>		
Line	<b>SAW Sales Allocator</b>				
1	NC Retail MWH Sales Allocation	Company Records	57,382,346		
2	SC Retail MWH Sales Allocation	Company Records	21,540,084		
3	Total Retail	Line 1 + Line 2	<hr/>	78,922,430	
<b>Allocation 1 to state based on kWh sales</b>					
4	NC Retail	Line 1 / Line 3		<b>72.7072722%</b>	
<b>Demand Allocators</b>					
			NC	SC	Total
			<hr/>		
5	Residential	Company Records	5,494,974	1,731,591	7,226,565
6	Non Residential	Company Records	6,437,669	2,290,766	8,728,435
7	Total	Line 5 + Line 6	<hr/>	11,932,643	4,022,357
				15,955,000	
<b>Allocation 2 to state based on peak demand</b>					
8	NC Retail	Line 7, NC / Line 7 Total		<b>74.7893638%</b>	
<b>Allocation 3 NC res vs non-res Peak Demand to retail system peak</b>					
9	NC Residential	Line 5 NC/ Line 7 Total		<b>34.4404513%</b>	
10	NC Non-residential	Line 6 NC/ Line 7 Total		<b>40.3489126%</b>	

Miller Exhibit 5, page 3

Duke Energy Carolinas, LLC  
 EE/DSM Vintage 2 True Up for the Period January 1, 2011 to December 31, 2011  
 Docket Number E-7, Sub 1073  
 Allocation Factors

			MWH			
Line	<b>SAW Sales Allocator</b>					
1	NC Retail MWH Sales Allocation	Company Records	55,966,071			
2	SC Retail MWH Sales Allocation	Company Records	21,019,094			
3	Total Retail	Line 1 + Line 2	76,985,165			
	<b>Allocation 1 to state based on kWh sales</b>					
4	NC Retail	Line 1 / Line 3	<b>72.6972151%</b>			
	<b>Demand Allocators</b>					
				NC	SC	Total
5	Residential	Company Records	5,179,896	1,627,477	6,807,373	
6	Non Residential	Company Records	6,788,010	2,476,617	9,264,627	
7	Total	Line 5 + Line 6	11,967,906	4,104,094	16,072,000	
	<b>Allocation 2 to state based on peak demand</b>					
8	NC Retail	Line 7, NC / Line 7 Total	<b>74.4643230%</b>			
	<b>Allocation 3 NC res vs non-res Peak Demand to retail system peak</b>					
9	NC Residential	Line 5 NC/ Line 7 Total	<b>32.2293181%</b>			
10	NC Non-residential	Line 6 NC/ Line 7 Total	<b>42.2350050%</b>			

Miller Exhibit 5, page 4

Duke Energy Carolinas, LLC  
 EE/DSM Vintage 3 True Up for the Period January 1, 2012 to December 31, 2012  
 Docket Number E-7, Sub 1073  
 Allocation Factors

			MWH		
Line	SAW Sales Allocator				
1	NC Retail MWH Sales Allocation	Company Records	54,555,907		
2	SC Retail MWH Sales Allocation	Company Records	20,466,527		
3	Total Retail	Line 1 + Line 2	75,022,434		
Allocation 1 to state based on kWh sales					
4	NC Retail	Line 1 / Line 3	72.7194575%		
Demand Allocators					
			NC	SC	Total
5	Residential	Company Records	5,588,503	1,732,909	7,321,412
6	Non Residential	Company Records	6,397,286	2,322,302	8,719,588
7	Total	Line 5 + Line 6	11,985,789	4,055,211	16,041,000
Allocation 2 to state based on peak demand					
8	NC Retail	Line 7, NC / Line 7 Total	74.7197120%		
Allocation 3 NC res vs non-res Peak Demand to retail system peak					
9	NC Residential	Line 5 NC/ Line 7 Total	34.8388691%		
10	NC Non-residential	Line 6 NC/ Line 7 Total	39.8808428%		

Miller Exhibit 5, page 5

Duke Energy Carolinas, LLC  
 EE/DSM Vintage 4 True Up for the Period January 1, 2013 to December 31, 2013  
 Docket Number E-7, Sub 1073  
 Allocation Factors

			MWH			
Line	SAW & New Mechanism Sales Allocator at Generator					
1	NC Retail MWH Sales Allocation	Company Records	58,149,791			
2	SC Retail MWH Sales Allocation	Company Records	21,551,077			
3	Total Retail	Line 1 + Line 2	79,700,868			
Allocation 1 to state based on kWh sales						
4	NC Retail	Line 1 / Line 3	72.9600473%			
Demand Allocators			NC	SC	Total	
5	Residential	Company Records	5,051,778	1,502,084	6,553,862	
6	Non Residential	Company Records	6,119,392	2,175,746	8,295,138	
7	Total	Line 5 + Line 6	11,171,170	3,677,830	14,849,000	
Allocation 2 to state based on peak demand						
8	NC Retail	Line 7, NC / Line 7 Total	75.2318001%			
Allocation 3 NC res vs non-res Peak Demand to retail system peak						
9	NC Residential	Line 5 NC/ Line 7 Total	34.0209980%			
10	NC Non-residential	Line 6 NC/ Line 7 Total	41.2108021%			

Miller Exhibit 5, page 6

Duke Energy Carolinas, LLC  
Vintage 2014-Vintage 2016 Estimate Allocation for the Period January 1, 2014 to December 31, 2016  
Docket Number E-7, Sub 1073  
Allocation Factors

			MWH		
			<hr/>		
Line	<b>SAW &amp; New Mechanism Sales Allocator at Generator</b>				
1	NC Retail MWH Sales Allocation	Company Records	58,149,791		
2	SC Retail MWH Sales Allocation	Company Records	21,551,077		
3	Total Retail	Line 1 + Line 2	<hr/>	79,700,868	
<b>Allocation 1 to state based on kWh sales</b>					
4	NC Retail	Line 1 / Line 3		<b>72.9600473%</b>	
<b>Demand Allocators</b>					
			NC	SC	Total
			<hr/>		
5	Residential	Company Records	5,051,778	1,502,084	6,553,862
6	Non Residential	Company Records	6,119,392	2,175,746	8,295,138
7	Total	Line 5 + Line 6	<hr/>	11,171,170	3,677,830
				14,849,000	
<b>Allocation 2 to state based on peak demand</b>					
8	NC Retail	Line 7, NC / Line 7 Total		<b>75.2318001%</b>	
<b>Allocation 3 NC res vs non-res Peak Demand to retail system peak</b>					
9	NC Residential	Line 5 NC/ Line 7 Total		<b>34.0209980%</b>	
10	NC Non-residential	Line 6 NC/ Line 7 Total		<b>41.2108021%</b>	

**NOTE: These allocation factors are used for estimated vintages 2014-2016 based on the latest Cost of Service Study filed in 2014.**

Duke Energy Carolinas, LLC  
DSM/EE Cost Recovery Rider 7  
Docket Number E-7 Sub 1073  
Forecasted kWh Sales for Rate Period for SAW

		Revised Estimate							
		Total 2015	Total 2016						
Fall 2014 Sales Forecast - kWhs									
North Carolina Retail:									
Line									
1	Residential	21,388,729,000	21,674,738,000						
2	Non-Residential	35,780,312,000	36,268,911,000						
3	Total Retail	57,169,041,000	57,943,649,000						
Opt Out Sales									
		2014 kwh usage							
	Vintage 1 Opt Out								
4	EE	13,296,546,224							
5	DSM	13,784,407,762							
	Vintage 2 Opt Out								
6	EE	12,973,155,813							
7	DSM	13,318,680,372							
	Vintage 3 Opt Out								
8	EE	12,711,971,239							
9	DSM	13,168,690,059							
	Vintage 4 Opt Out								
10	EE	12,302,899,768							
11	DSM	13,053,216,824							
Non-Residential Forecast Sales Less Opt Out									
			(for use in Rider 7 Rate Components)						
		V1 EE Rate Components	V1 DSM Rate Components	V2 EE Rate Components	V2 DSM Rate Components	V3 EE Rate Components	V3 DSM Rate Components	V4 EE Rate Components	V4 DSM Rate Components
12	Total Non-Residential	36,268,911,000	36,268,911,000	36,268,911,000	36,268,911,000	36,268,911,000	36,268,911,000	36,268,911,000	36,268,911,000
13	Less V1 EE Opt Out	13,296,546,224							
14	Less V1 DSM Opt Out		13,784,407,762						
15	Less V2 EE Opt Out			12,973,155,813					
16	Less V2 DSM Opt Out				13,318,680,372				
17	Less V3 EE Opt Out					12,711,971,239			
18	Less V3 DSM Opt Out						13,168,690,059		
19	Less V4 EE Opt Out							12,302,899,768	
20	Less V4 DSM Opt Out								13,053,216,824
21	Sales for Rider Calculation	22,972,364,776	22,484,503,238	23,295,755,187	22,950,230,628	23,556,939,761	23,100,220,941	23,966,011,232	23,215,694,176
Non-Residential Forecast Sales Less Opt Out									
			(for use in updated 2015 Revenue estimate )						
		V1 EE Rate Components	V1 DSM Rate Components	V2 EE Rate Components	V2 DSM Rate Components	V3 EE Rate Components	V3 DSM Rate Components	V4 EE Rate Components	V4 DSM Rate Components
22	Total Non-Residential	35,780,312,000	35,780,312,000	35,780,312,000	35,780,312,000	35,780,312,000	35,780,312,000	35,780,312,000	35,780,312,000
23	Less V1 EE Opt Out	13,296,546,224							
24	Less V1 DSM Opt Out		13,784,407,762						
25	Less V2 EE Opt Out			12,973,155,813					
26	Less V2 DSM Opt Out				13,318,680,372				
27	Less V3 EE Opt Out					12,711,971,239			
28	Less V3 DSM Opt Out						13,168,690,059		
29	Less V4 EE Opt Out							12,302,899,768	
30	Less V4 DSM Opt Out								13,053,216,824
31	Sales for Rider Calculation	22,483,765,776	21,995,904,238	22,807,156,187	22,461,631,628	23,068,340,761	22,611,621,941	23,477,412,232	22,727,095,176

Duke Energy Carolinas, LLC  
DSM/EE Cost Recovery Rider 7  
Docket Number E-7 Sub 1073  
Forecasted kWh Sales for Rate Period for Vintage Years 2014-2016

		Total 2015	Total 2016				
Fall 2014 Sales Forecast - kWhs							
North Carolina Retail:							
Line							
1	Residential	21,388,729,000	21,674,738,000				
2	Non-Residential	35,046,050,545	35,534,649,545				
3	Total Retail	56,434,779,545	57,209,387,545				
Opt Out Sales							
		2014 kWh Usage					
	Vintage 2014 Estimated Opt Out						
4	EE	11,710,358,468					
5	DSM	12,396,526,283					
	Vintage 2015 Estimated Opt Out						
6	EE	11,780,971,318					
7	DSM	12,451,913,984					
	Vintage 2016 Estimated Opt Out						
8	EE	11,780,971,318					
9	DSM	12,451,913,984					
Non-Residential Forecast Sales Less Opt Out (to be used for Rider 7 Rate Components)							
		2014 EE Rate Components	2014 DSM Rate Components	2015 EE Rate Components	2015 DSM Rate Components	2016 EE Rate Components	2016 DSM Rate Components
10	Total Non-Residential	35,534,649,545	35,534,649,545	35,534,649,545	35,534,649,545	35,534,649,545	35,534,649,545
11	Less V2014 Estimated Opt Out	11,710,358,468					
12	Less V2014 Estimated DSM Opt Out		12,396,526,283				
13	Less V2015 Estimated EE Opt Out			11,780,971,318			
14	Less V2015 Estimated DSM Opt Out				12,451,913,984		
15	Less V2016 Estimated EE Opt Out					11,780,971,318	
16	Less V2016 Estimated DSM Opt Out						12,451,913,984
17	Sales for Rider Calculation	23,824,291,077	23,138,123,262	23,753,678,227	23,082,735,561	23,753,678,227	23,082,735,561
Non-Residential Forecast Sales Less Opt Out (to be used for updated Rider 6 revenue estimate)							
		2014 EE Rate Components	2014 DSM Rate Components	2015 EE Rate Components	2015 DSM Rate Components	2016 EE Rate Components	2016 DSM Rate Components
18	Total Non-Residential	35,046,050,545	35,046,050,545	35,046,050,545	35,046,050,545	35,046,050,545	35,046,050,545
19	Less V2014 Estimated Opt Out	11,710,358,468					
20	Less V2014 Estimated DSM Opt Out		12,396,526,283				
21	Less V2015 Estimated EE Opt Out			11,780,971,318			
22	Less V2015 Estimated DSM Opt Out				12,451,913,984		
23	Less V2016 Estimated EE Opt Out					11,780,971,318	
24	Less V2016 Estimated DSM Opt Out						12,451,913,984
25	Sales for Rider Calculation	23,335,692,077	22,649,524,262	23,265,079,227	22,594,136,561	23,265,079,227	22,594,136,561

RIDER EE (NC)  
ENERGY EFFICIENCY RIDERAPPLICABILITY (North Carolina Only)

Service supplied under the Company's rate schedules is subject to approved adjustments for new energy efficiency and demand-side management programs approved by the North Carolina Utilities Commission (NCUC). The Rider Adjustments are not included in the Rate Schedules of the Company and therefore, must be applied to the bill as calculated under the applicable rate. Cost recovery under Rider EE consists of two four-year term programs, years 2009 – 2013 and years 2014 – 2017 as outlined separately below. This rider applies to service supplied under all rate schedules for program years 2009-2013 but does not apply to Rate Schedules OL, FL, PL, GL, and NL for program years 2014-2017.

I. PROGRAM YEARS 2009-2013GENERAL PROVISIONS

This Rider will recover the cost of new energy efficiency and demand-side management programs, using the method approved by the NCUC, for programs implemented over a four-year period (*i.e.*, comprising four 12-month program years or "Vintage Years"). In each year this Rider will include components to recover revenue requirements related to demand-side management and energy efficiency programs implemented in that Vintage Year, as well as net lost revenues resulting from the energy efficiency programs. Net lost revenues are revenue losses, net of both marginal costs avoided at the time of the lost kilowatt hour sale(s) and increases in revenues resulting from any activity by the Company's public utility operations that cause a customer to increase demand or energy consumption. Net lost revenues associated with each Vintage Year will be recovered for 36 months upon implementation, except that the recovery of net lost revenues will end upon implementation of new rates approved by the Commission in a general rate case or comparable proceeding to the extent that rates are set in a rate case for vintages up to that point. To recover net lost revenues for programs implemented in years 3 and 4, the Rider will continue beyond the four-year period.

Revenue requirements will be determined on a system basis and allocated to North Carolina retail customers based on the North Carolina retail contribution to system retail peak demand for demand side management programs and North Carolina retail contribution to system retail kWh sales for energy efficiency programs. Residential customer classes will pay for residential programs and non-residential customer classes will pay for non-residential programs through methods found appropriate by the Commission for demand-side management and energy efficiency programs, respectively. All allocation factors will be based on the Company's most recently completed cost of service study utilizing the allocation method approved by NCUC in the Company's most recent general rate proceeding and will exclude the amounts related to customers that elect to opt out of this Rider.

TRUE-UP PROVISIONS

Rider amounts will initially be determined based on estimated kW and kWh impacts related to expected customer participation in the programs, and will be trued-up as actual customer participation and actual kW and kWh impacts are verified. If a customer participates in any vintage of programs, the customer is subject to the true-ups as discussed in this section for any vintage of programs in which the customer participated.

Participation true-ups: After the completion of the first Vintage Year, the Rider will include a true-up of previous Rider amounts billed to reflect actual customer participation in the programs.

Measurement and verification true-up: In the seventh year a final true-up will be based on changes in participation combined with actual verified kW and kWh savings.

Earnings cap true-up: In the seventh year, a true up will adjust customer bills, if applicable, to refund with interest, amounts collected through the Rider in excess of the earnings cap, in accordance with the following levels of achievement of actual energy and peak demand reductions and allowed return on investment.

<u>Percentage Actual Target Achievement</u>	<u>Return on Investment Cap on Program Costs Percentage</u>
>=90%	15%
80% to 89%	12%
60% to 79%	9%
< 60%	5%



Duke Energy Carolinas, LLC

Electricity No. 4  
 North Carolina Tenth (Proposed) Revised Leaf No. 62  
 Superseding North Carolina Ninth Revised Leaf No. 62

RIDER EE (NC)  
 ENERGY EFFICIENCY RIDER

DETERMINATION OF ENERGY EFFICIENCY RIDER ADJUSTMENT

Energy Efficiency Adjustments (EEA) will be applied to the energy in kilowatt hours (kWh) billed of all rate schedules for each vintage as determined by the following formula, adjusted as appropriate for the time value of money:

EEA Residential (expressed as cents per kWh) =

(Residential Avoided Cost Revenue Requirement + Residential Net Lost Revenues) / Forecasted Residential kWh Sales for the Rider billing period

Where

Residential Avoided Cost Revenue Requirement = (Residential Demand-Side Management Program Avoided Cost X 75%) + (Residential Energy Efficiency Program Avoided Cost X 50%)

EEA Non-residential (expressed as cents per kWh) =

(Non-residential Avoided Cost Revenue Requirement + Non-residential Net Lost Revenues) / Forecasted Non-residential kWh Sales for the Rider billing period

Where

Non-residential Avoided Cost Revenue Requirement = (Non-residential Demand-Side Management Program Avoided Cost X 75%) + (Non-residential Energy Efficiency Program Avoided Cost X 50%)

II. PROGRAM YEARS 2014-2017GENERAL PROVISIONS

This Rider will recover the cost of new energy efficiency and demand-side management programs, using the method approved by the NCUC, for programs implemented over a four-year period (*i.e.*, comprising four 12-month program years or "Vintage Years").

TRUE-UP PROVISIONS

Rider amounts will initially be determined based on estimated kW and kWh impacts related to expected customer participation in the programs, and will be true-up as actual customer participation and actual kW and kWh impacts are verified. If a customer participates in any vintage of programs, the customer is subject to the true-ups as discussed in this section for any vintage of programs in which the customer participated.

RIDER EE OPT OUT PROVISION FOR QUALIFYING NON-RESIDENTIAL CUSTOMERS

The Rider EE increment applicable to energy efficiency programs and/or demand-side management programs will not be applied to the energy charge of the applicable rate schedule for Customers qualified to opt out of the programs where:

- a. The Customer has notified the Company that it has, or has plans for implementing alternative energy efficiency measures in accordance with quantifiable goals.
- b. Electric service to the Customer must be provided under:
  1. An electric service agreement where the establishment is classified as a "manufacturing industry" by the Standard Industrial Classification Manual published by the United States Government and where more than 50% of the electric energy consumption of such establishment is used for its manufacturing processes. Additionally, all other agreements billed to the same entity associated with the manufacturing industry located on the same or contiguous properties are also eligible to opt out.
  2. An electric service agreement for general service as provided for under the Company's rate schedules where the Customer's annual energy use is 1,000,000 kilowatt hours or more. Additionally, all other agreements billed to the same entity with lesser annual usage located on the same or contiguous properties are also eligible to opt out.

Duke Energy Carolinas, LLC

Electricity No. 4  
 North Carolina Tenth (Proposed) Revised Leaf No. 62  
 Superseding North Carolina Ninth Revised Leaf No. 62

RIDER EE (NC)  
 ENERGY EFFICIENCY RIDER

The following additional provisions apply for qualifying customers who elect to opt out:

For Customers who elect to opt out of energy efficiency programs, the following provisions also apply:

- Qualifying customers may opt out of the Company's energy efficiency programs each calendar year only during the annual two-month enrollment period between November 1 and December 31 immediately prior to a new Rider EE becoming effective on January 1. (Qualifying new customers have sixty days after beginning service to opt out).
- Customers may not opt out of individual energy efficiency programs offered by the Company. The choice to opt out applies to the Company's entire portfolio of energy efficiency programs.
- If a customer participates in any vintage of energy efficiency programs, the customer, irrespective of future opt out decisions, remains obligated to pay the remaining portion of the lost revenues for each vintage of energy efficiency programs in which the customer participated.
- Customers who elect to opt out during the two-month annual enrollment period immediately prior to the new Rider EE becoming effective may elect to opt in to the Company's energy efficiency programs during the first 5 business days of March each calendar year. Customers making this election will be back-billed retroactively to the effective date of the new Rider EE.

For Customers who elect to opt out of demand-side management programs, the following provisions also apply:

- Qualifying customers may opt out of the Company's demand-side management program during the enrollment period between November 1, and December 31 immediately prior to a new Rider EE becoming effective on January 1 of the applicable year. (Qualifying new customers have sixty days after beginning service to opt out).
- If a customer elects to participate in a demand-side management program, the customer may not subsequently choose to opt out of demand-side management programs for three years.
- Customers who elect to opt out during the two-month annual enrollment period immediately prior to the new Rider EE becoming effective may elect to opt in to the Company's demand-side management program during the first 5 business days of March each calendar year. Customers making this election will be back-billed to the effective date of the new Rider EE.

Any qualifying non-residential customer that has not participated in an energy efficiency or demand-side management program may opt out during any enrollment period, and have no further responsibility to pay Rider EE amounts associated with the Customer's opt out election for energy efficiency and/or demand-side management programs.

**ENERGY EFFICIENCY RIDER ADJUSTMENTS (EEA) FOR ALL PROGRAM YEARS**

The Rider EE amounts applicable to the residential and nonresidential rate schedules for the period January 1, 2016 through December 31, 2016 including utility assessments are as follows:

<u>Residential</u>	Vintage 1, 2, 3,4, and 2014 <sup>1</sup>	0.0251¢ per kWh
	Vintage 2014 <sup>2</sup> , 2015, 2016	0.3324¢ per kWh
	Total Residential Rate	0.3575¢ per kWh
<u>Nonresidential</u>		
	Vintage 1	
	Energy Efficiency	0.0025¢ per kWh
	Demand Side Management	0.0016¢ per kWh
	Vintage 2	
	Energy Efficiency	0.0146¢ per kWh
	Demand Side Management	0.0018¢ per kWh
	Vintage 3	
	Energy Efficiency	0.0259¢ per kWh
	Demand Side Management	(0.0008)¢ per kWh

Duke Energy Carolinas, LLC

Electricity No. 4  
 North Carolina Tenth (Proposed) Revised Leaf No. 62  
 Superseding North Carolina Ninth Revised Leaf No. 62

RIDER EE (NC)  
 ENERGY EFFICIENCY RIDER

Vintage 4		
Energy Efficiency		0.0330¢ per kWh
Demand Side Management		0.0003¢ per kWh
Vintage 2014 <sup>3</sup>		
Energy Efficiency		0.0405¢ per kWh
Demand Side Management		(0.0043)¢ per kWh
Vintage 2015 <sup>3</sup>		
Energy Efficiency		0.0345¢ per kWh
Demand Side Management		NA
Vintage 2016 <sup>3</sup>		
Energy Efficiency		0.2164¢ per kWh
Demand Side Management		0.0709¢ per kWh
Total Nonresidential		0.4369¢ per kWh

<sup>1</sup> Includes the true-up of program costs, shared savings and lost revenues from Year 1 of Vintage 2014

<sup>2</sup> Includes the estimate of Year 3 lost revenues of Vintage 2014

<sup>3</sup> Not Applicable to Rate Schedules OL, FL, PL, GL, and NL

Each factor listed under Nonresidential is applicable to nonresidential customers who are not eligible to opt out and to eligible customers who have not opted out. If a nonresidential customer has opted out of a Vintage(s), then the applicable energy efficiency and/or demand-side management charge(s) shown above for the Vintage(s) during which the customer has opted out, will not apply to the bill.