BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2012-XXX-E

In re: Application of Duke Energy Carolinas, LLC For Approval of Rider 4	))))))	DUKE ENERGY CAROLINAS, LLC'S APPLICATION FOR APPROVAL OF RIDER 4

Duke Energy Carolinas, LLC ("the Company or Duke Energy Carolinas") respectfully requests that the Public Service Commission of South Carolina ("Commission") approve its application for Rider 4 to recover certain costs and revenue associated with its modified Save-A-Watt program. The Rider consists of the following components: avoided costs and lost revenues for Vintage 4; the second year of lost revenues for Vintage 3; a true-up of avoided costs and year 1 lost revenues for Vintage 2; and a true-up of Vintage 1, including a true-up of avoided costs and years 1, 2 and 3 lost revenues[1], all in accordance with the modified Save-A-Watt cost recovery mechanism approved in Order Number 2010-79, Docket No. 2009-226-E and the Commission's Order related to Rider 3[2], Order Number 2012-202, Docket No. 2011-420-E. The proposed Rider 4 also includes a component to recover South Carolina's retail share of program costs associated with the Company's Interruptible Service and Stand-By Generation programs ("Existing DSM Programs").[3]

[1] Year 3 of lost revenues for Vintage 1 includes only the month of January 2012, because the Company's new base rates effective February 6, 2012 incorporate recovery of the remainder of year 3 lost revenues.

[2] In Rider 3, the Commission ordered Duke to true-up Vintages 1 and 2 for actual kilowatt and kilowatt hour impacts for all programs except the Non Residential Smart$aver Custom Rebate Program and the Low Income Energy Efficiency and Weatherization Assistance Program. Order No. 2012-202, at 2.

[3] Order No. 2010-79, at 66-67.

BACKGROUND

1. A modified Save-A-Watt cost recovery mechanism for energy efficiency ("EE") and demand side management programs ("DSM") was approved by the Commission in Order No. 2010-79, Docket No. 2009-226-E. The compensation model provided that the revenue requirements for Duke Energy Carolinas' EE and DSM programs recover (a) 75% of the Company's annual avoided capacity costs savings applicable to DSM programs, (b) 55% of the net present value avoided energy and capacity costs applicable to EE programs, and (c) lost revenues for EE programs only.[4] Duke Energy Carolinas recovers its program costs for the Existing DSM Programs as a separate component of the proposed Rider 4.[5]

2. The Company's Save-A-Watt recovery mechanism also employs a vintage year concept where a vintage year is defined to be the period in which a specific DSM or EE measure is installed for an individual participant or a group of participants. In this application, the proposed Rider 4 includes revenue requirements from Vintages 1, 2, 3 and 4. Vintage 1 covers the period of February 1, 2010 through December 31, 2010. Vintage 2 covers the period of January 1, 2011 through December 31, 2011. Vintage 3 covers the period of January 1, 2012 through December 31, 2012; and, Vintage 4 covers the period of January 1, 2013 through December 31, 2013.

3. The Commission has previously approved the following EE Riders related to these vintages:

- Vintage 1 in Order No. 2010-79,[6] Docket No. 2009-226-E;
- Vintage 2 and a rider that allowed the Company to recover the second year of Vintage 1 lost revenues for non residential energy efficiency participants in Order No. 2010-853, Docket No. 2010-299-E; and,[7]

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[4] Order No. 2010-79, at 67.
[5] Id. at 17.
[6] Id. at 74.

- Vintage 3, which included recovery of the second year of lost revenues for Vintage 2 and revenues associated with a true-up of Vintage 1, in Order No. 2012-202[8], Docket No. 2011-420-E.

RIDER 4 REQUEST

4. The revenues Duke Energy Carolinas proposes to recover under the proposed Rider 4 follow:

- $16,177,793 for Residential Customers (**Exhibit A**, Line 11) and
- $26,110,459 for Non-Residential Customers (**Exhibit A**, Line 34).

5. For Rider 4, the billing factors were separated to reflect non-residential customer participation in EE programs, DSM programs, or both EE and DSM programs. The proposed Rider 4 billing factors include prospective and true-up components. Based on the total costs to be recovered under the proposed Rider 4, as shown on **Exhibit A**, the billing factors applicable to South Carolina customers for the billing period January 1, 2013 through December 31, 2013, would be as follows:

[7] Order No. 2010-853, at 2.
[8] Order No. 2012-202, at 4.

Residential Billing Factors	¢ / kWh
Residential Billing Factor for Rider 4 True-Up Component (Vintages 1 and 2)	0.0869
Residential Billing Factors for Rider 4 Prospective Component	0.1653
Residential Rider 4 (Total)	0.2522

Non-Residential Billing Factors for Rider 4 True-Up Component (Vintages 1 and 2)	¢ / kWh
Vintage 1 EE Participant	0.0254
Vintage 1 DSM Participant	0.0010
Vintage 2 EE Participant	0.0671
Vintage 2 DSM Participant	0.0185

Non-Residential Billing Factors for Rider 4 Prospective Components	¢ / kWh
Vintage 3 EE Participant	0.0120
Vintage 4 EE Participant	0.0797
Vintage 4 DSM Participant	0.0859

The proposed tariff sheet for Rider 4 is attached as **Exhibit B**. A summary of the calculations used to determine these billing factors and the revenue requirements for Rider 4 is attached as **Exhibit A**. The supporting calculations for **Exhibit A** are attached. Program costs for Vintages 1 and 2 are shown on **Vintage 1, Exhibit 5** and **Vintage 2, Exhibit 5**.

RIDER 4 CALCULATION

6. As approved, the modified SAW program requires the Company to use the avoided cost rate as originally calculated as long as the evaluation, measurement and verification ("EM&V") true-ups show that the combined avoided energy and capacity costs have neither increased nor decreased by more than 25%. The Company prepares and reports avoided cost computations biennially in accordance with the regulations of the Public Utility Regulatory

Policies Act of 1978. In its most recent report of 2010, the Company reported that total avoided costs had not changed by more than 25%.[9] This result was noted in the Company's Rider 3 application. The original avoided cost rates have been used for the relevant calculations in this filing.

7. Rider 4 includes components to recover revenue requirements related to EE and DSM programs implemented in Vintage 4, lost revenues resulting from the EE programs, and a true-up of Vintage 1 and 2. Lost revenues associated with each Vintage year are recovered for 3 years.[10]

8. In previous filings, the Company's estimates of lost revenues were computed at the residential and non-residential class levels, using an average residential tariff rate and an average non-residential tariff rate. The Company computed residential lost revenues using a weighted average of rate schedules RS and RE applied to total residential kW and kWh savings. For non-residential customers, the Company used rate schedule OPT for total non-residential kW and kWh savings. The Company expected these rate schedules to reflect the majority of participation in EE programs and to therefore be acceptably accurate. In preparing the Rider currently before the Commission, the Company analyzed the source of the kW and kWh reductions in more detail and found that the non-residential kW and kWh savings for customers on rate schedules other than OPT are a more significant portion of the non-residential savings than originally expected. As a result, using only the OPT rate schedule to compute lost revenues does not produce an acceptably accurate calculation.[11] Consequently, in this filing, the Company

[9] Order No. 2010-79, at 67.

[10] The Company expects to file a rate case later in 2012. To prevent double recovery via collection of revenues through this rider and revised base rates, the Company is not seeking to collect the third year of lost revenues for Vintage 2 via Rider 4 to the extent they are included in new base rates. The Company has included in Rider 4 only the months of January through April 2013 for the third year of lost revenues for Vintage 2.

[11] Schedules SGS, LGS and I are characterized by low demand rates and high energy rates, whereas schedule OPT is characterized by high demand rates and low energy rates. The construct of demand vs. energy charges on rate

has computed net lost revenues by separating the non-residential kW and kWh savings among non-residential rate schedules SGS, LGS, I and OPT (General Service) and OPT (Industrial Service) to determine the applicable amounts. These schedules represent the preponderance of participation in non-residential EE programs. The Company has also calculated net lost revenues for residential customers by separating the residential savings among rate schedules RS and RE, as the preponderance of participation in residential EE programs is on these rate schedules.

9. As shown in **Vintage 1, Exhibit 2** and **Vintage 2, Exhibit 2**, for the true-ups conducted in this Rider, the avoided cost revenue requirements have been updated to reflect current information related to MW reductions, participation, and the EM&V results for most EE and DSM programs offered in Vintages 1 and 2. Additionally, as contemplated by Jane L. McManeus' testimony in Docket Number 2009-226-E, the Company has "applied interest at the Company's approved after-tax weighted average cost of capital" to the total amount under collected for Vintages 1 and 2.[12]

10. The method used to determine whether an amount of interest is due the Company or is due customers reflects both the timing and amount of avoided cost revenue requirements and lost revenues due the Company, as well as the timing and amount of revenues the Company has collected from customers through its EE Rider. To compute interest, the Company multiplied the number of months for which interest applies times the monthly interest rate times the dollar amount on which interest should be computed (i.e., Interest = Number of Months X Interest Rate X Dollar Amount). The rate of interest is the Company's after-tax weighted average cost of capital authorized by the Commission for the applicable time period. The

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schedules SGS, LGS and I as compared to OPT prevents a reasonable combination of such schedules into a weighted average non-residential rate.

[12] Docket No. 2009-226-E, Transcript Volume 5, at 815, Order No. 2010-79 at 72, and Exhibit 1 at 3, Stipulation of Testimony and Waiver of Cross-examination.

number of months is computed as the number of months from 1) the midpoint of period during which the Company incurred the revenue requirements associated with the vintage being trued up to 2) the midpoint of the period during which the true-up amount will be billed through Rider 4 (i.e., the billing period January 2013 – December 2013). The interest computations are performed on two dollar amounts: (a) the amounts of revenue requirements the Company incurred for the vintage being trued up and (b) the dollar amounts of revenues collected for the vintage being trued up. A comparison of the two interest amounts is made to determine whether customers owe the Company interest or the Company owes interest to its customers. If the interest computed for (a) is greater than the interest computed for (b), then the Company is due the difference in interest amounts. If the interest computed for (a) is less than the interest computed for (b), the customer is due the difference in interest amounts. These calculations are shown on **Rider 4, Exhibit 4**, pages 1-3.

11. Duke Energy Carolinas has incorporated EM&V results into the Vintage 4 estimates and the estimates for year 2 of Vintage 3 lost revenues. As new EM&V results become available, they will be utilized until they are superseded by new EM&V results, if any. New EM&V results will be applied for the purposes of truing up vintages as of the first day of the month immediately following the month in which the study participation sample for the EM&V was completed.

12. For all EE programs, with the exception of Non-Residential Smart$aver Custom Rebate Program and Low Income Energy Efficiency and Weatherization Assistance Program, EM&V results have been applied to replace all initial estimates that were used at the beginning of the program offering. Any subsequent EM&V results will be applied prospectively,

superseding older EM&V results as of the first day of the month immediately following the month in which the study participation sample for the EM&V was completed.

13. This true-up process will not apply to the Non-Residential Smart$aver Custom Program because the EM&V process for this program is fundamentally different than other EE programs. Each project and impact for the Non-Residential Smart$aver Customer Program is unique, requiring a distinct EM&V plan which prevents EM&V from being applied retrospectively to this program. Thus EM&V for the Non-Residential Smart$aver Custom Program will only be applied on a going-forward basis from the EM&V sample period. Additionally, EM&V will be applied differently for the Low Income Energy Efficiency and Weatherization Assistance Program because the Company did not offer it to its customers. Instead, the State Energy Offices offered similar services to this program as part of the American Recovery and Reinvestment Act. Because this program was not offered to customers, there will not be EM&V impact evaluation results to apply retrospectively. With Commission approval, Duke Energy Carolinas has implemented a new Residential Neighborhood Program.[13] Once EM&V has been performed on the new Neighborhood Low Income Program, it will be used to replace the initial estimates used and applied to all participation from the program approval date.

14. For the Vintage 1 true-up, revenue requirements were adjusted according to the earnings cap approved in Order No. 2010-79.[14] Adjustments were made to limit actual revenue requirements for Vintage 1 to an amount that results in earnings that do not exceed the allowed level. The amount of allowed earnings for each Vintage is based on a percentage of program

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[13]In Rider 3, the Company indicated the program would be called Neighborhood Low Income; however, the Company decided on a different name. Order No. 2012-401, at 1.

[14] The earnings cap calculation is required for Rider 3 and the final true-up. The Company partially trued up Vintage 1 in Rider 3 and applied the earnings cap. In its revised true-up of Vintage 1, to be consistent with the original mandate, the Company has again used the earnings cap.

costs. The specific percentage is associated with the Company's level of achievement of Save-A-Watt target results. The earnings cap calculation for the Vintage 1 true-up compares actual earnings based on a percentage of program costs to those earned through avoided cost revenues. The earnings cap calculation is provided in **Vintage 1, Exhibit 6**.

15. Revenue requirements for Save-A-Watt DSM programs are determined on a system basis and allocated to South Carolina retail customers based on the class contribution to system retail peak demand. Revenue requirements for Save-A-Watt EE programs were determined on a system basis and allocated to all South Carolina retail customer classes based on South Carolina retail contribution to system retail sales. Residential customers pay for the allocated cost of residential programs and non residential customers pay for the allocated share of non-residential programs. The cost of the Existing DSM Programs is recovered based on the cost of bill credits and amounts paid to customers participating in these programs. Revenue requirements for Existing DSM Programs are determined on a system basis and allocated to South Carolina retail customer classes based on the class contribution to system peak demand. The allocation factors used to determine South Carolina's portion of avoided costs can be found for:[15]

- Vintage 1 in **Vintage 1, Exhibit 4**.
- Vintage 2 in **Vintage 2, Exhibit 4**.
- Vintage 4 in **Vintage 2,**[16] **Exhibit 4**.

16. The proposed Rider 4 billing factors are based on the method approved by the Commission in Order No. 2010-79. The formula is designed to provide Duke Energy Carolinas

[15]The Vintage 3 component of Rider 4 consists of lost revenues for the second year of Vintage 3. No avoided cost allocation factor is necessary

[16] Vintage 2, Exhibit 4 uses the most current allocation factor, which is from 2011. Thus, the same allocation factor is used for Vintage 4.

with jurisdictional revenues to recover avoided energy and capacity costs and lost revenues and includes an earnings cap provision. Existing DSM Programs are a separate component of the proposed Rider 4.[17] The proposed rider also reflects the opt-out provision for industrial customers.[18] Projected South Carolina retail Kwh sales used in the rate per kWh computation were updated to reflect spring 2012 sales forecast and estimated impacts of opt-out elections. **Rider 4, Exhibit 3**. The calculation of each component of Rider 4 is discussed in further detail below.

Energy Efficiency

Vintage 4

17. The Company seeks to recover the estimated avoided cost revenue requirement for Vintage 4, which begins January 1, 2013 and ends December 31, 2013. The estimates reflect the most current information on expected participation and load impacts (the associated kW and kWh reductions for each EE program or measure to be offered during Vintage 4), using original avoided cost rates. **Vintage 4, Exhibit 2**.

18. The Company also seeks to recover estimated lost revenues for the first year of Vintage 4, January 2013 to December 2013. Again, the estimates reflect the most current information on expected participation and load impacts. Lost revenues are collected on a state specific basis because they reflect the under-collection of state specific costs. The calculation of lost revenues by program is provided in **Rider 4, Exhibit 1**.

19. Estimated revenues to be collected were based on achieving 85% of the avoided costs savings target through December 31, 2013. The Company chose the 85% billing rate in

[17] Order No. 2010-79, at17.. Recovery of Existing DSM Programs costs is based on traditional program cost recovery and recovered from all native load customers. Id. at 66. See also, Vintage 1 Exhibit 3; Vintage 2 Exhibit 3; Vintage 4 Exhibit 3.

[18] Id. at 18.

order to provide a conservative estimate and avoid over-charging customers if the Company was unable to meet its entire avoided cost savings target. Since the industrial customers may opt-out of the DSM and/or EE components of Rider EE, the total non-residential revenue requirement reflects the elections made by eligible customers not to participate in a Vintage or Vintages.[19] **Vintage 4, Exhibit 1.**

Vintage 3

20. The Company seeks to recover year two of lost revenues for Vintage 3 EE programs based on expected participation and load impacts. Estimated revenues to be collected are based on achieving 85% of targeted avoided costs savings. **Vintage 3, Exhibit 1.**

Vintage 2 True-Up

21. Per Commission Order,[20] the Company has conducted a true-up of the avoided cost revenue requirement based on actual participation in the Vintage 2 programs and actual load impact for all programs except the non residential Smart$aver Custom Rebate Program and the Low Income Energy Efficiency and Weatherization Assistance Program. The Company used estimated load impacts for these programs.

22. The Company has also conducted a true-up of Year 1 of the lost revenues for Vintage 2 using actual load impact for all programs except the non residential Smart$aver Custom Rebate Program and the Low Income Energy Efficiency and Weatherization Assistance Program. The Company used estimated load impacts for these programs. The Company used actual 2011 rates.

23. Once the Company calculated the actual amount it was authorized to collect for avoided costs and lost revenues, the Company compared this amount to the amount collected in

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[19] Vintage 3 opt-out impacts are used to estimate Vintage 4 participation because the enrollment period for Vintage4 will not be complete until December 31, 2012.
[20] Order No. 2012-401, at 2.

Rider 2 and estimated collections in Rider 3 (estimated because Vintage Year 3 is not yet complete) to determine the true-up amount. **Rider 4, Exhibit 2** and **Vintage 2, Exhibit 1**, for residential customers lines 11-15 and for non-residential customers lines 25-29.

Vintage 1 True-Up

24. Per Commission Order,[21] the Company has conducted a true-up of the avoided cost revenue requirement based on actual participation in the Vintage 1 programs, actual load impact for all programs except the non residential Smart$aver Custom Rebate Program and the Low Income Energy Efficiency and Weatherization Assistance Program. The Company used estimated load impacts for these programs. The Company used original avoided cost rates.

25. The Company has also conducted a true-up of the lost revenues for Vintage 1 using actual load impact for all programs except the non residential Smart$aver Custom Rebate Program and the Low Income Energy Efficiency and Weatherization Assistance Program. The Company used estimated load impacts for these programs. Actual 2010 rates were used.

26. Once the actual amount the Company was authorized to collect for avoided costs and lost revenues was calculated, the Company compared this amount to the amount collected in Rider 1, Rider 2, and estimated collections in Rider 3 (estimated because Vintage Year 3 is not yet complete) to determine the true-up amount. **Rider 4, Exhibit 2** and **Vintage 1, Exhibit 1**, for residential customers lines 11-17 and for non-residential customers lines 27-33.

Demand Side Management

Vintage 4

27. As previously stated, Duke Energy Carolinas receives 75% of the Company's annual avoided capacity costs savings applicable to DSM programs. For Vintage 4, avoided cost is based on estimated participation and load impacts for January through December 2013. The

[21] Order No. 2012-401, at 2.

Company used original avoided cost rates and estimated revenues to be collected were based on achieving 85% of targeted avoided cost savings.

Vintage 2

28. Per Commission order, the Company has conducted a true-up of the avoided cost based on actual participation and actual load impact from January through December of 2011. The Company used original avoided cost rates.

29. Once the Company calculated the actual amount it was authorized to collect for avoided costs, the Company compared this amount to the amount collected in Rider 2 to determine the true-up amount. **Rider 4, Exhibit 2** and **Vintage 2, Exhibit 1**, for residential customers lines 11-15 and for non-residential customer lines 25-29.

Vintage 1

30. For the true-up, the Company used actual participation, actual load impacts, and original avoided cost rates.

31. Once the actual amount the Company was authorized to collect for avoided costs was calculated, the Company compared this amount to the amount collected in Rider 1 and estimated collections in Rider 3 (estimated because Vintage Year 3 is not yet complete) to determine the true-up amount. **Rider 4, Exhibit 2** and **Vintage 1, Exhibit 1**, for residential customers lines 11-17 and for non-residential customers lines 27-33.

Calculation of Revenue Requirement and Billing Factors

32. Based on the results of the programs to date and the Company's latest estimates of future program impacts, Duke Energy Carolinas calculated the residential revenue requirement of $16,220,081 and the non-residential revenue requirement of $26,125,621. **Exhibit A.** The revenue requirements were divided by the projected South

Carolina sales (kWh) for the rate period to calculate the residential and non-residential billing factors as illustrated in **Exhibit B**. For non-residential rates, the projected South Carolina sales (kWh) for the rate period exclude estimated sales of eligible customers that have elected to opt out.

CONCLUSION

Based on the foregoing, the Company respectfully requests that the Commission grant its application seeking approval of Rider 4 as described in its application. Additionally, the Company requests that the Commission allow the proposed rate to be put into effect without notice and hearing pursuant to S.C. Code Ann. Section 58-27-870(F). The proposed rates do not require a determination of the entire rate structure and overall rate of return, and will facilitate an orderly rate administration.

Dated this 1st day of August, 2012.

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Rider 4 Exhibits

Exhibit A	**Summary for Rider EE Exhibits and Factors**
Exhibit B	**Tariff Sheet**
Vintage 1, Exhibit 1	**Calculation of True-Up for Vintage 1, Years 1, 2, and one month of Year 3**
Vintage 1, Exhibit 2	**Load Impacts and Avoided Cost Revenue Requirements by Program – Vintage 1**
Vintage 1, Exhibit 3	**Existing DSM Program Costs – Vintage 1**
Vintage 1, Exhibit 4	**Allocation Factors – Vintage 1**
Vintage 1, Exhibit 5	**Actual Program Costs – Vintage 1**
Vintage 1, Exhibit 6	**Earnings Cap Calculation – Vintage 1**
Vintage 2, Exhibit 1	**Calculation of True-Up for Vintage 2, Year 1**
Vintage 2, Exhibit 2	**Load Impacts and Avoided Cost Revenue Requirements by Program – Vintage 2**
Vintage 2, Exhibit 3	**Existing DSM Program Costs – Vintage 2**
Vintage 2, Exhibit 4	**Allocation Factors – Vintage 2**
Vintage 2, Exhibit 5	**Actual Program Costs – Vintage 2**
Vintage 3, Exhibit 1	**Calculation of Estimate for Vintage 3, Year 2 Lost Revenue**
Vintage 4, Exhibit 1	**Calculation of Estimate for Vintage 4, Year 1**
Vintage 4, Exhibit 2	**Load Impacts and Avoided Cost Revenue Requirements by Program – Vintage 4**
Vintage 4, Exhibit 3	**Existing DSM Program Costs – Vintage 4**
Rider 4, Exhibit 1	**South Carolina Lost Revenues Summary**
Rider 4, Exhibit 2	**DSM/EE Revenues Collected from Riders (By Vintage)**
Rider 4, Exhibit 3	**Forecasted kWh Sales for Rate Period**
Rider 4, Exhibit 4, Page 1 of 3	**Residential Interest Calculation - Vintages 1 and 2**
Rider 4, Exhibit 4, Page 2 of 3	**Non-Residential Interest Calculation - Vintage 1**

Rider 4, Exhibit 4,
Page 3 of 3

Non-Residential Interest Calculation - Vintage 2