BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

PUBLIC VERSION

| In re: |) | |
|---|---|----------------------------|
| |) | DUKE ENERGY CAROLINAS, |
| Application of Duke Energy Carolinas, LLC |) | LLC'S APPLICATION FOR |
| For Approval of Rider 3 |) | APPROVAL OF RIDER 3 |
| |) | |

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 3 to recover estimated costs related to Vintage 3 and the second year of estimated lost revenues related to Vintage 2, and to collect additional amounts due related to the true-up of Vintage 1 in accordance with the modified Save-A-Watt cost recovery mechanism approved in Order Number 2010-79, Docket No. 2009-226-E. The proposed Rider 3 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")¹.

BACKGROUND

1. A modified Save-A Watt cost recovery mechanism for energy efficiency and demand side management programs 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' energy efficiency ("EE") and demand side management ("DSM") programs recover (a) 75% of the Company's annual avoided

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Order No. 2010-79, p. 17 & 66.

capacity costs savings applicable to DSM programs, (b) 55% of the net present value ("NPV") avoided energy and capacity costs applicable to EE programs, and (c) lost revenues for EE programs only.² Duke Energy Carolinas recovers its program costs for the Existing DSM Programs as a separate component of the proposed Rider 3.³

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. For EE programs, customers may decide each year whether they will enroll (or re-enroll) in the Company's portfolio of EE programs for each successive vintage year. In this application, the proposed Rider 3 includes revenue requirements from Vintages 1, 2, and 3.⁴ Vintage 1 covers the period of February 1, 2010 through December 31, 2010. Vintage 2 covers January 1, 2011 through December 31, 2011. Vintage 3 covers January 1, 2012 through December 31, 2012.

3. The Commission approved Rider EE Vintage Year 1 in Order No. 2010-79.⁵ In Order No. 2010-853, Docket No. 2010-299-E, the Commission approved Rider EE Vintage 2 for Vintage Year 2; and a rider that allowed the Company to recover the second year of Vintage 1 lost revenues for non-residential energy efficiency participants.⁶

² Order 2010-79, p. 67.

³ Order No. 2010-79, p. 17 & 66.

⁴ Vintage 0 revenue requirements covering the period of June 1, 2009, through January 31, 2010, are addressed in a separate application.

⁵ Order No. 2010-79, p. 69 & 74.

⁶ Order No. 2010-853, p. 1.

| | Vintage 1 (cents/KWh) | Vintage 2 (cents/KWh) |
|---------------------------|--------------------------|--------------------------|
| Residential Rider EE | 0.1736 | 0.2697 |
| Non-Residential Rider EE | 0.0195 | 0.0401 |
| Non-Residential Rider DSM | 0.0360 | 0.0596 |

| 4. Following are the approved rat | es for Rider EE Vintage 1 | and Vintage 2: |
|-----------------------------------|---------------------------|----------------|
|-----------------------------------|---------------------------|----------------|

In Order No. 2010-853, the Commission also approved a rider of 0.0011 cents/KWh to recover the second year of Vintage 1 lost revenues for non-residential energy efficiency participants.⁷

RIDER 3 REQUEST

5. The revenues Duke Energy Carolinas proposes to recover under the proposed Rider 3 follow:

- \$20,732,726 for Residential Customers⁸ and
- \$14,696,700 for Non-Residential Customers.⁹

6. For Rider 3, the billing factors were separated to reflect customer participation in EE programs, DSM programs, or both EE and DSM programs. The proposed Rider 3 billing factors include prospective and true-up components.¹⁰ Based on the total costs to be recovered under the proposed Rider 3, the billing factors applicable to South Carolina customers for the billing period January 1, 2012, through December 31, 2012, would be as follows:

⁷ Order No. 2010-853, p. 2.

⁸ Exhibit B, Residential line 3.

 ⁹ Exhibit B, Non-Residential Billing Factors. See also Exhibit 1, Line 27, and Exhibit 9, Lines 21 & 26.

¹⁰ Exhibit 9 and Exhibit 1.

| Residential Billing Factors | ¢ / kWh | |
|---|----------------------|--|
| Residential Billing Factor for Rider 3 | 0.0857 11 | |
| Prospective Components | 0.0857 | |
| Residential Billing Factors for Rider 3 | 0 2284 12 | |
| True-Up Component (Vintage 1) | 0.2284 | |
| Residential Rider 3 (Total) | 0.3141 ¹³ | |

| Non-Residential Billing Factors for Rider 3 Prospective Components | ¢ / kWh |
|---|----------------|
| Vintage 1 EE Participant | 0.0006^{-14} |
| Vintage 2 EE Participant | 0.0052^{-15} |
| Vintage 3 EE Participant | 0.0495^{-16} |
| Vintage 3 DSM Participant | 0.0742^{-17} |

| Non-Residential Billing Factors for | |
|-------------------------------------|----------------------|
| Rider 3 True-Up Component | ¢ / kWh |
| (Vintage 1) | |
| Vintage 1 EE Participant | 0.0187^{-18} |
| Vintage 1 DSM Participant | 0.0140 ¹⁹ |

The proposed tariff sheet for Rider 3 is attached as **Exhibit A.** A summary of the calculations used to determine these billing factors and the revenue requirements for Rider 3 is attached as **Exhibit B.** The supporting calculations for **Exhibit B** for Vintage 1 are attached as **Exhibits 1** through 8 and for Vintages 2 and 3 are **Exhibits 9** through

14.

7. Attached as **Exhibit C** is *Duke Energy Carolinas EE and DSM Vintage 1*

Program Overview, which provides a description of each program offered during Vintage

¹¹ Exhibit 1, Line 15.

¹² Exhibit 9, Line 13.

¹³ Exhibit B, Residential Line 5.

¹⁴ Exhibit B, Non-Residential Line 3

¹⁵ Exhibit B, Non-Residential Line 6.

¹⁶ Exhibit B, Non-Residential Line 9.

¹⁷ Exhibit B, Non-Residential Line 12.

¹⁸ Exhibit B, Non-Residential Line 15.

¹⁹ Exhibit B, Non-Residential Line 18.

It also includes updates on the performance of the EE and DSM programs for Vintage
 1.

RIDER 3 CALCULATION

8. The Rider 3 calculation allows Duke Energy Carolinas to recover the cost of its Save-A-Watt EE and DSM programs for programs implemented over a four year period. Rider 3 includes components to recover revenue requirements related to DSM and EE programs implemented in Vintage 3, lost revenues resulting from the EE programs, and includes a true-up of Vintage 1. Lost revenues associated with each Vintage year are recovered for 3 years. **Exhibit A.**

9. 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 nonresidential 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.²⁰ The allocation factors used to determine South Carolina's portion of avoided costs for Vintage 1 are provided in **Exhibit 4** and for Vintage 3 in **Exhibit 13**.

²⁰ Exhibits 3 and 12.

10. Avoided energy and capacity costs (per MWH and per MW-Year, respectively) remain fixed until the evaluation, measurement, and verification ("EM&V") true-ups occur.²¹ Vintage Year 3 includes the mid-term EM&V true-up process that incorporates the most recent available EMV results.²² The avoided cost revenue requirements were updated to reflect current information related to participation and the EM&V results for certain EE and DSM programs being offered in Vintage 3.²³ The Company is in the process of testing its DSM programs to verify the MW reductions available. While current estimates show the Company can achieve approximately 500 MW's of reduction from non-residential programs, Duke Energy Carolinas is in the process of performing EM&V on its residential DSM program to validate the MW reductions. However, due to the complexity of this EM&V, results will not be available until the end of 2011.

11. The proposed Rider 3 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 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 3.²⁴ The proposed rider also reflects the opt-out provision for industrial customers.²⁵ The calculation of each component of Rider 3 is discussed in further detail below.

²¹ Order No. 2010-79, p. 17 and Order Exhibit 1, p. 19.

²² Order No. 2010-79, p. 67-68.

²³ Exhibit 10.

Order No. 2010-79, p. 17. Existing DSM Programs' costs are a separate component. Recovery of Existing DSM costs is based on traditional program cost recovery and recovered from all native load customers. Order No. 2010-79, p. 66-67.

²⁵ Order No. 2010-79, p. 18.

A. Avoided Costs Component

12. Load impacts, avoided cost revenue requirements and lost revenues by program were estimated for costs related to Vintage 3 for the period January 1, 2012, through December 31, 2012.²⁶ They were also examined to true-up Vintage 1 for the period February 1, 2010 through December 31, 2010.²⁷ The avoided costs revenue requirements were updated to reflect the difference between estimated and actual participation in EE and DSM programs for Vintage 1.²⁸

13. Estimated revenues to be collected were based on achieving 85% of the avoided costs savings target through December 31, 2012.²⁹ The Company chose the 85% billing rate in 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,³⁰ the total non-residential revenue requirement reflects the elections made by eligible customers not to participate in Vintages 1, 2 or 3.³¹

14. The Company estimated participation results and the associated kW and kWh reductions for each EE and DSM program or measure to be offered during Vintage 3.³² Based on estimated participation and kW and kWh savings to be achieved during Vintage 3, and the fixed avoided cost per MWh and MW-Year, the Company calculated

Exhibit 10.

Exhibit 2.

²⁸ For Vintage 1, the Energy Efficiency Education Program for Schools includes a minor calculation error the effect of which is to over-state slightly the participation in that program for the Vintage 1 period. The Company will address this issue and provide an adjustment to the Residential EE rate in the Vintage 4 filing in 2012.

²⁹ Exhibit 9, Lines 8, 20, and 23.

³⁰ Order No. 2010-79, p. 68-69.

³¹ Vintage 2 opt-out impacts are used to estimate Vintage 3 participation because the enrollment period for Vintage 3 has not yet occurred.

³² Exhibit 10.

the avoided cost revenue requirements for residential and non-residential customers.³³ Projected South Carolina retail kWh sales used in the rate per kWh computation were updated to reflect the Summer 2011 sales forecast and estimated impacts of opt-out elections.³⁴

B. Lost Revenue Component

15. Lost revenues are calculated on a state-specific basis because they reflect the under-collection of state-specific costs. The calculation of lost revenues by programs is provided in **Exhibit 11.** Duke Energy Carolinas will collect 36 months of lost revenues associated with Vintage 3 participation to the extent that such amounts would not be recovered through base rates proposed in the Company's base rate case to be filed in August in Docket No. 2011-271-E.

16. Lost revenues associated with Vintages 1, 2, and 3 were calculated for the period of January 1, 2012 through December 31, 2012, and have been incorporated into the Rider 3 revenue requirements. Lost revenues were updated³⁵ to reflect current SC retail rates and to reflect the primary rate schedules for which kWh savings are being achieved. The update includes lost revenues for one month for Vintage 1, lost revenues for the second year of Vintage 2, and lost revenues for the first year of Vintage 3.

C. Mid-Term True-Up

17. The mid-term true-up incorporates the most recent available EM&V results to update assumptions and to revise planned spending, savings, and projected revenue and projected kW and kWh impacts. The mid-term results are used to determine future Rider EE amounts for billing remaining Save-A-Watt vintages. Duke Energy

³³ Exhibit 9.

³⁴ Exhibit 5 & Exhibit 14.

³⁵ Exhibit 11.

Carolinas included measure-level savings adjustments and net-to-gross analysis in the mid-term true-up. The mid-term true-up incorporates the latest, finalized EM&V results in the avoided cost true-up, the lost revenue true-up, and the earnings cap true-up. The final EM&V true-up in year 6 will incorporate all EM&V studies on a net-to-gross results and measure-level savings completed since the mid-term true-up.³⁶

18. Duke Energy Carolinas calculated the Vintage 1 True-Up of avoided costs, kW and kWh impacts,³⁷ lost revenues,³⁸ and billing factors³⁹ using actual participation and any EM&V results applicable to Vintage 1. The Vintage 1 True-Up compares collected revenues⁴⁰ using estimated participation to the earned revenue requirements using actual participation and EM&V as applicable. Duke Energy Carolinas applied EM&V results prospectively, since no EM&V results were received during Vintage 1. The original kW and kWh impacts per measure were used along with actual participation to compute earned revenue requirements. Information on the actual program costs for Vintage 1 is provided in **Exhibit 7.** In Rider 3, over/under collection for Vintage 1 is accounted for through the Vintage 1 True-up.⁴¹

19. The Company will use EM&V to update the estimated impacts from the first vintage of programs. Initial EM&V results shall be applied retrospectively to program impacts that were based upon estimates derived from industry standards. Accordingly, in its Vintage 4 application in 2012 for all EE programs, with the exception of Non-Residential Smart\$aver Custom Rebate Program and Low Income Energy Efficiency and

³⁶ Order No. 2010-79, p. 67-68 & Order Exhibit 1, p. 20.

³⁷ Exhibit 2.

³⁸ Exhibit 2.

 $[\]frac{39}{40}$ Exhibit 2.

 $^{^{40}}$ Exhibit 8.

⁴¹ Exhibit 1.

Weatherization Assistance Program, EM&V results shall be applied retrospectively to the beginning of the program offering. Subsequent EM&V results, if any, will then 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.

20. 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. This program offers custom energy efficiency measures that are not readily available or have not yet been evaluated by the Company. As such, each project and impact for the Non-Residential Smart\$aver Custom 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. Duke Energy Carolinas will therefore likely replace this program with a new Neighborhood Low Income Program. Because this program was not offered to customers there will not be EM&V impact evaluation results to apply retrospectively. As such, once EM&V has been performed on the new Neighborhood Low Income Program, it will be applied retrospectively, beginning with the first day the Neighborhood Low Income Program is approved.

21. Additionally, for all new programs and pilots not offered as part of the Company's original EE and DSM program portfolio, the Company will apply EM&V using initial estimates of impacts until Duke Energy Carolinas has valid EM&V results. The initial EM&V results will then be applied retrospectively to the beginning of the program or pilot. Subsequent EM&V results, if any, will then be applied prospectively, superseding older EM&V results.

22. Duke Energy Carolinas has incorporated EM&V results into the Vintage 3 estimates as part of the mid-term true-up. 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.

23. Revenue requirements were also adjusted according to the earnings cap approved in Order No. 2010-79. Adjustments were made to limit actual revenue requirements for completed vintages to an amount that results in earnings that do not exceed the allowed level. The amount of allowed earnings for Vintage 1 is based upon a percentage of program costs. The specific percentage is associated with the Company's level of achievement of Save-A-Watt target results. The earnings cap calculation for Vintage 1 compares actual earnings based upon a percentage of program costs to those earned through avoided cost revenues. The earnings cap calculation is provided in **Exhibit 6.**

E. Calculation of Revenue Requirement and Billing Factors

24. 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 20,732,726 and the non-residential revenue requirement of 14,696,700. 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**.⁴²

CONCLUSION

Based on the foregoing, the Company respectfully requests that the Commission grant its application seeking approval of Rider 3 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.

⁴² Exhibit 5 and Exhibit 14.

Dated this 11th day of October 2011.

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Attorneys for Duke Energy Carolinas, LLC

THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

In re:)) DUKE ENERGY CAROLINAS, Application of Duke Energy Carolinas, LLC) DUKE ENERGY CAROLINAS, For Approval of Rider 3) OF RIDER 3

LIST OF EXHIBITS

| Exhibit A Proposed Tariff Sheet for Rider EE | | sed Tariff Sheet for Rider EE |
|--|------------|--|
| Exhibit B | Summ | ary of Calculations for Rider EE Exhibits and Factors |
| Exhibit | :1 | Vintage 1 True-Up - Calculation of True-Up |
| Exhibit | 2 | Vintage 1 True-Up - Load Impacts, Avoided Costs Revenue Requirements and Lost Revenues by Program |
| Exhibit | 3 | Vintage 1 True-Up – Existing DSM Program Costs |
| Exhibit | : 4 | Vintage 1 True-Up – Allocation Factors |
| Exhibit | 5 | Vintage 1 True-Up – Forecasted kWh Sales |
| Exhibit | 6 | Vintage 1 True-Up - Earnings Cap Calculation |
| Exhibit | 7 | Vintage 1 True-Up – Actual Program Costs |
| Exhibit | 8 | Vintage 1 True-Up – EE Rider Revenue Collected |
| Exhibit | . 9 | Vintage 3 – Calculation of Prospective Amount |
| Exhibit | : 10 | Vintage 3 – Load Impacts, Avoided Costs Revenue Requirements and Lost Revenues by Program |
| Exhibit | 11 | Vintage 3 – Lost Revenue |
| Exhibit | 12 | Vintage 3 – Existing DSM Program Costs for 2012 |
| Exhibit | 13 | Vintage 3 – Allocation Factors |
| Exhibit | : 14 | Vintage 3 – Forecasted kWh Sales |

Exhibit C - Duke Energy Carolinas EE and DSM Vintage 1 Program Overview

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

| In re: |) |
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| |) DUKE ENERGY CAROLINAS, |
| Application of Duke Energy Carolinas, LLC |) LLC'S REQUEST FOR APPROVAL |
| For Approval of Rider 3 |) OF RIDER 3 |
| |) |

Exhibit A

Proposed Tariff Sheet for Rider 3

South Carolina Second (Proposed) Revised Leaf No. 62 Superseding South Carolina First Revised Leaf No. 62

RIDER EE (SC) ENERGY EFFICIENCY RIDER

APPLICABILITY (South Carolina Only)

Service supplied under the Company's rate schedules is subject to approved energy efficiency adjustments over or under the Rate set forth in the approved rate schedules for energy efficiency programs approved by the Public Service Commission of South Carolina (PSCSC).

GENERAL PROVISIONS

This Rider will recover the cost of Duke Energy Carolinas' Save-a-Watt ("SAW") energy efficiency and demand-side management programs, using the method approved by the PSCSC, for programs implemented over a 4 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, as well as lost revenues resulting from the energy efficiency programs. Lost revenues associated with each vintage will be recovered for 36 months upon implementation. As a result the Rider will continue beyond the 4 year period to fully recover lost revenues for programs in years 3 and 4.

Revenue requirements for SAW demand-side management programs will be 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 SAW energy efficiency programs will be determined on a system basis and allocated to all South Carolina retail customer classes based on SC retail contribution to system retail sales. Residential customers will pay for the allocated cost of residential programs; non-residiential customers will pay for the allocated cost of non-residential programs.

The Rider will recover the cost of Duke Energy Carolinas' Interruptible Service and Stand-By Generator programs ("Existing DSM Programs") based on the cost of bill credits and amounts paid to customers participating on these programs ("Program Costs"). Revenue requirements will be determined on a system basis and allocated to SC retail customer classes based on the class contribution to system peak demand.

All allocation factors will be based on the Company's cost of service study and will exclude the amounts related to customers that elect to opt out of this Rider.

TRUE-UP PROVISIONS

Rider amounts for SAW programs 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.

Participation true-ups: After the first 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: EM&V activities and results will be included in a mid-term EM&V-based true-up process that will be reflected in Vintage Year 3 Rider EE collections. A final EM&V true-up reflected in Vintage Year 6 Rider EE collections will incorporate all EM&V studies completed since the mid-term EM&V true-up. EM&V results will include measure-level savings adjustments and net-to-gross analysis. In addition, the mid-term and final true-ups will incorporate the most recent EM&V results in the avoided cost true-up, the lost revenue true-up, and the earnings cap true-up.

Earnings cap true-up: In the sixth year a true up will be billed, if applicable, to refund amounts collected through the Rider in excess of the earnings cap, in accordance with the following levels of achievement and allowed return on investment.

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

Rider amounts for Existing DSM Programs initially will be estimated program costs for the calendar year and will be trued-up to actual a subsequent rider.

South Carolina First Revised Leaf No. 62 Effective for service on and after January 1, 2012 PSCSC Docket No., Order No.

South Carolina Second (Proposed) Revised Leaf No. 62 Superseding South Carolina First Revised Leaf No. 62

RIDER EE (SC) ENERGY EFFICIENCY RIDER

DETERMINATION OF ENERGY EFFICIENCY RIDER ADJUSTMENT

Energy Efficiency Adjustments (EEA) will be applied to the energy (kilowatt hours) billed of all rate schedules for each vintage as determined by the following formula:

EEA Residential (expressed as cents per kwh) = SAW Residential Adjustment + Existing DSM Residential Adjustment

SAW Residential Adjustment = Residential Avoided Cost Revenue Requirement + Residential Lost Revenues / Forecasted Residential kWh Sales for the Rider billing period

Where

Residential Avoided Cost Revenue Requirement = (Residential Demand Side Management Program Avoided Cost Revenue Requirement X 75%) + (Residential Energy Efficiency Program Avoided Cost Revenue Requirement X 55%)

And

Existing DSM Residential Adjustment = Non-SAW Residential Program Costs / Forecasted Residential kWh Sales for the Rider billing period

 $\underline{\text{EEA Non-residential}}$ (expressed as cents per kwh) = SAW Non-residential Adjustment + Existing DSM Non-residential Adjustment

SAW Non-residential Adjustment = Non-residential Avoided Cost Revenue Requirement + Non-residential Lost Revenues / Forecasted Non-residential kWh Sales (excluding opt out sales) for the Rider billing period

Where

Non-residential Avoided Cost Revenue Requirement = (Non-residential Demand Side Management Program Avoided Cost Revenue Requirement X 75%) + (Non-residential Energy Efficiency Program Avoided Cost Revenue Requirement X 55%)

And

Existing DSM Non-residential Adjustment = Non-SAW Non-residential Program Costs / Forecasted Non-residential kWh Sales (excluding opt out sales) for the Rider billing period

ENERGY EFFICIENCY RIDER ADJUSTMENTS (EEA)

As a result of the Commission's Order No. ______ in Docket No. ______ the EEA applicable to the residential and nonresidential rate schedules for the period January 1, 2012 through December 31, 2012, including revenue-related taxes and utility assessments, are as follows:

| Residential | 0.3141¢ per kWh | |
|--|------------------------------------|------------------------|
| <u>Nonresidential</u> | Energy Efficiency | Demand Side Management |
| Vintage 1 True-up Vintage 1 Lost Revenues | 0.0187¢ per kWh 0.0006¢ per kWh | 0.0140 ¢ per kWh NA |
| Vintage 2 Lost Revenues | 0.0052¢ per kWh | NA |
| Vintage 3 | 0.0495¢ per kWh | 0.0742¢ per kWh |

Each factor listed under Non-residential is applicable to non-residential customers who are not eligible to opt out and to eligible customer who have not opted out. If a nonresidential customer has opted out of a Vintage(s), then the charge(s) shown above for the Vintage(s) during which the customer has opted out, will not apply to the bill.

OPT OUT PROVISION FOR QUALIFYING MANUFACTURING CUSTOMERS

South Carolina First Revised Leaf No. 62 Effective for service on and after January 1, 2012 PSCSC Docket No., Order No.

South Carolina Second (Proposed) Revised Leaf No. 62 Superseding South Carolina First Revised Leaf No. 62

RIDER EE (SC) ENERGY EFFICIENCY RIDER

The Nonresidential EEA increment applicable to energy efficiency programs and/or demand-side management programs will not be applied to the energy billed to the Customer under the applicable nonresidential rate schedule for Customers qualified to opt out of the programs where:

- a. The Customer attests or certifies to the Company that it has performed or had performed for it an energy audit or analysis within the three year period preceding the opt out request and has implemented or has plans for implementing the cost-effective energy efficiency measures recommended in that audit or analysis; and
- b. The Customer is served under 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.

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 an nnual two month enrollment period beginning January 1 and concluding March 1.
- Customers may not opt out of individual energy efficiency programs offered by the Company. The choice to optout 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 efficiency programs in which the customer participated.

For Customers who elect to opt out of Demand Side Management Programs, the following provisions also apply:

- Qualifying customers may make a one-time election for the 4 year plan to opt out of the Company's demand-side management programs within 60 days after the effective date of new rates and charges approved by the PSCSC in Docket No. 2009-226-E.
- If a customer elects to participate in a demand-side management program, the customer may not subsequently choose to opt out of the program for the remaining term of the 4 year plan.

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Exhibit B

Summary of Calculations for Rider EE Exhibits and Factors

Duke Energy Carolinas DSM/EE Cost Recovery Rider 3 Exhibit Summary for Rider EE Exhibits and Factors

Exhibit B

Residential Billing Factor

| 1 Costs to be Recovered for Vintage 1 True-up | Exhibit 1, Line 13 | \$ 5,656,566 | |
|--|---------------------|--------------------------|-------|
| 2 Costs to be Recovered for Vintage 3 Prospective Amounts | Exhibit 9, Line 11 | \$ 15,076,160 | |
| 3 Total Costs to be Recovered in Rider 3 | Line 1 + Line 2 | \$ 20,732,726 Applica | ation |
| 4 Projected SC Residential Sales (kWh) for rate period | Exhibit 14, Line 10 | 6,600,286,497 | |
| 5 SAW and Existing DSM Program Revenue Requirements Residential Rider EE (cents per kWh) | Line 3 / Line 4 | 0.3141 Applica | ation |

Non-Residential Billing Factors for Rider 3 Prospective Components

| 1 2 3 | . Total EE Revenue Requirement - Vintage 1 EE Participant . Projected Vintage 1 EE Participants SC Non-Residential Sales (kwh) for rate period . SAW EE Revenue Requirement Vintage 1 Lost Revenues Non-Residential Rider EE (cents per kWh) | Exhibit 9, Line 21 Exhibit 14, Line 24 Line 1 / Line 2 | \$ 60,431 9,745,896,379 0.0006 | Application |
|-------------|---|--|--|-------------|
| 4 | Total EE Revenue Requirement - Vintage 2 EE Participant Projected Vintage 2 EE Participants SC Non-Residential Sales (kwh) for rate period SAW EE Revenue Requirement Vintage 2 Los Revenues Non-Residential Rider EE (cents per kWh) | Exhibit 9, Line 21 Exhibit 14, Line 24 Line 4 / Line 5 | \$ 484,417 9,345,300,616 0 0052 | Application |
| Ū | | | 0.0032 | Application |
| 7 | ' Total EE Revenue Requirement - Vintage 3 EE Participant | Exhibit 9, Line 21 | 4,625,858 | |
| 8 | Projected Vintage 3 EE Participants SC Non-Residential Sales (kwh) for rate period | Exhibit 14, Line 24 | 9,345,300,616 | |
| 9 | SAW EE Revenue Requirement Vintage 3 Non-Residential Rider EE (cents per kWh) | Line 7 / Line 8 | 0.0495 | Application |
| 10 | Costs to be Recovered DSM Revenue Requirement Vintage 3 DSM Participant | Exhibit 9, Line 26 | \$ 6,476,892 | |
| 11 | . Projected Vintage 3 DSM Participants SC Non-Residential Sales (kwh) for rate period | Exhibit 14, Line 24 | 8,732,320,422 | |
| 12 | SAW and Existing DSM Revenue Requirement Vintage 3 Non-Residential Rider EE (cents per kWh) | Line 10 / Line 11 | 0.0742 | Application |

Non-Residential Billing Factors for Rider 3 True-Up Components (Vintage 1)

| 13 Costs to be Recovered for Vintage 1 True-up - Vintage 1 EE Participant 14 Projected Vintage 1 EE Participants SC Non-Residential Sales (kwh) for rate period 15 SAW EE Revenue Requirement Vintage 1 True-up Non-Residential Rider EE (cents per kWh) | Exhibit 1, Line 27 Exhibit 5, Line 24 Line 13 / Line 14 | \$ 1,821,354 9,745,896,379 0.0187 | Application |
|--|---|---|-------------|
| 16 Costs to be Recovered for Vintage 1 True-up - Vintage 1 DSM Participant 17 Projected Vintage 1 DSM Participants SC Non-Residential Sales (kwh) for rate period | Exhibit 1, Line 27 Exhibit 5, Line 24 | \$ 1,227,748 8,759,014,583 | |
| 18 SAW and Existing DSM Revenue Requirement Vintage 1 True-up Non-Residential Rider EE (cents per kWh) | Line 16 / Line 17 | 0.0140 | Application |
| Total costs to be recovered in Rider 3 from Non-Residential Customers | | | |
| 1 Total EE Revenue Requirement - Vintage 1 EE Participant | Exhibit 9, Line 21 | \$ 60,431 | |
| 4 Total EE Revenue Requirement - Vintage 2 EE Participant | Exhibit 9, Line 21 | \$ 484,417 | |
| 7 Total EE Revenue Requirement - Vintage 3 EE Participant | Exhibit 9, Line 21 | \$ 4,625,858 | |
| 10 Costs to be Recovered DSM Revenue Requirement Vintage 3 DSM Participant | Exhibit 9, Line 26 | \$ 6,476,892 | |
| 13 Costs to be Recovered for Vintage 1 True-up - Vintage 1 EE Participant | Exhibit 1, Line 27 | \$ 1,821,354 | |
| 16 Costs to be Recovered for Vintage 1 True-up - Vintage 1 DSM Participant | Exhibit 1, Line 27 | \$ 1,227,748 | |
| | | \$ 14,696,700 | Application |

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

| In re: |) |
|---|------------------------------|
| |) DUKE ENERGY CAROLINAS, |
| Application of Duke Energy Carolinas, LLC |) LLC'S REQUEST FOR APPROVAL |
| For Approval of Rider 3 |) OF RIDER 3 |
| |) |

Exhibit 1

Vintage 1 True-Up - Calculation of True-Up

Duke Energy Carolinas DSM/EE Vintage 1 True Up for the Period February 1, 2010 to December 31, 2010 Calculation of True Up (cents per kWh)

RESIDENTIAL

| | | Vintag | e 1 SC Retail | Gross Receipts Tax and | Vin | tage 3 SC Retail |
|--|------------------------|--------|---------------|------------------------|------|------------------|
| | | | Costs | Regulatory Fee Factor | Reve | nue Requirement |
| 1 EE Avoided Cost Component Ext | hibit 2, Col C, Line 6 | \$ | 15,390,941 | | | |
| 2 DSM Avoided Cost Component Ext | hibit 2, Col C, Line 7 | \$ | 2,740,719 | | | |
| 3 Residential Avoided Cost Revenue Requirement Lin | ie 1 + Line 2 | \$ | 18,131,660 | 1.004581 | | 18,214,721 |
| 4 Total Lost Revenues Ext | hibit 2, Col D, Line 6 | | | | \$ | 2,347,877 |
| 5 Residential Save-A-Watt Revenue Requirement Lin | ie 3 + Line 4 | | | - | | 20,562,598 |
| 6 Billing Factor | | | | | | 100% |
| 7 Residential Save-A-Watt Revenue Requirement for Billing Lin | ie 5 * Line 6 | | | - | \$ | 20,562,598 |
| 8 Residential Existing DSM Program Revenue Requirement Exi | hibit 3, Line 3 Res | \$ | 914,378 | 1.004581 | \$ | 918,567 |
| 9 Total Residential SAW & Existing DSM Program Revenue Requirement Lin | ie 7 + Line 8 | | | | \$ | 21,481,165 |
| 10 Earnings Cap Adjustment Exi | hibit 6, Line 27 Res | | | | | (5,466,947) |
| 11 Residential Revenue Requirement Capped Lin | ie 9 + Line 10 | | | | \$ | 16,014,218 |
| 12 Total Residential Rider EE Collections 2010 Exi | hibit 8, Line 2 | | | | \$ | 10,357,653 |
| 13 Residential True-up Amount Vintage 1 Lin | ie 11 - Line 12 | | | | | 5,656,566 |
| 14 Projected SC Residential Sales (kWh) for rate period Exi | hibit 5, Line 10 | | | | | 6,600,286,497 |
| 15 Residential Rider EE (cents per kWh) (Li | ne 13 / Line 14) * 100 | | | | | 0.0857 |

NON-RESIDENTIAL

| EE Revenue Requirement: | | | | Vintage 1 EE Participar | t | Vintage 1 DSM Participant | | | | |
|--|---|---|-----------|---|--|------------------------------|---|-------------------|--|--|
| | | Vintage 1 SC Retail Revenue Requirement | | Gross Receipts Tax and Regulatory Fee Factor | Vintage 1 SC Retail Revenue Requirement | Vintage 1 SC Retail Costs | Gross Receipts Tax and Regulatory Fee Factor | Vir Reta Re | ntage 1 SC ail Revenue quirement | |
| 16 SAW EE Avoided Cost Revenue Requirement | Exhibit 2, Col C, Line 14 | \$ | 4,194,974 | 1.004581 | \$ 4,214,192 | | | | | |
| 17 Lost Revenues Vintage 1 | Exhibit 2, Col D, Line 14 | | | | \$ 385,194 | | | | | |
| 18 Billing Factor | | | | | 100% | | | | | |
| 19 Total NonResidential EE Revenue Requirement | (Line 16 + Line 17) * Line 18 | | | | \$ 4,599,386 | | | | | |
| 20 SAW DSM Avoided Cost Component | Exhibit 2, Col C, Line 15 | | | | | \$ 3,647,458 | 1.004581 | \$ | 3,664,167 | |
| 21 Existing DSM Program Revenue Requirement | Exhibit 3, Line 3 Non-Res | | | | | \$ 1,216,891 | 1.004581 | \$ | 1,222,466 | |
| 22 Billing Factor | | | | | | | | | 100% | |
| 23 Total Non-Residential DSM Revenue Requirement | (Line 20 + Line 21) * Line 22 | | | | | | | \$ | 4,886,633 | |
| 24 Earnings Cap Adjustment | Exhibit 6, Line 27 Non- Res | | | | \$ (1,120,192) | | | \$ | (861,069) | |
| 25 Non-Residential Revenue Requirement Capped | Line 4 + Line 9, Line 21 + Line 24 | | | | \$ 3,479,193 | | | \$ | 4,025,564 | |
| 26 Total Non-Residential Rider EE Collections 2010 | Exhibit 8, Line 6 and Line 7 | | | | \$ 1,657,840 | | | \$ | 2,797,815 | |
| 27 Non-Residential True-up Amount Vintage 1 | Line 25 - Line 26 | | | | \$ 1,821,354 | | | \$ | 1,227,748 | |
| | | | | | | | | | | |
| 28 Projected Vintage 1 EE Participants SC Non-Residential Sales (kWh) for rate period | Exhibit 5, Line 24 | | | | 9,745,896,379 | | | | | |
| 29 Projected Vintage 1 DSM Participants SC Non-Residential Sales (kWh) for rate period | Exhibit 5, Line 24 | | | | | | | 8 | 3,759,014,583 | |
| 30 Non-Residential Rider EE Amounts (cents per kWh) | (Line 27 / Line 28 EE or Line 29 DSM) * 100 | | | | 0.0187 | | | | 0.0140 | |

V1 Exhibit 1

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

| In re: |) |
|---|------------------------------|
| |) DUKE ENERGY CAROLINAS, |
| Application of Duke Energy Carolinas, LLC |) LLC'S REQUEST FOR APPROVAL |
| For Approval of Rider 3 |) OF RIDER 3 |
| | |

Exhibit 2

Vintage 1 True-Up - Load Impacts, Avoided Costs Revenue Requirements and Lost Revenues by Program

V1 Exhibit 2

| | | | А | | В | | С | | D | | | | |
|--|----------------------------|----------------------------------|--|-----------------------------------|---|---------------------------------|---------------------------------|---------------------------------|-------------------------------|---------------------------------|--|-------|-----------------------------|
| | | | System Avoided Cost Revenue Requirement | | SC Allocation Factor | SC Residential Avoided Costs | | SC Residential Avoided Costs | | SC Residential Avoided Costs | | SC Re | esidential Lost Revenues |
| | System kW - Summer Peak | System Energy Reduction (kWh) | | | Allocation based on kWh sales | | A * B | | | | | | |
| Residential Programs | | | | | | | | | | | | | |
| FE Programs (at 55% Avoided Cost) | | | | | | | | | | | | | |
| 1 Residential Energy Assessments | 1,166 | 8.613.288 | Ś | 1.248.559 | 27.21216% | Ś | 339.760 | Ś | 87.501 | | | | |
| 2 Home Energy Comparison Report | 555 | 2,991,111 | \$ | 84,422 | 27.21216% | \$ | 22,973 | \$ | 109,370 | | | | |
| 3 Smart Saver [®] for Residential Customers | 43,751 | 464,293,288 | \$ | 53,480,071 | 27.21216% | \$ | 14,553,082 | \$ | 2,084,800 | | | | |
| 4 Low Income Energy Efficiency and Weatherization Assistance | 666 | 7,183,049 | \$ | 796,966 | 27.21216% | \$ | 216,872 | \$ | 33,114 | | | | |
| 5 Energy Efficiency Education Program for Schools | 1,158 | 6,240,039 | \$ | 949,038 | 27.21216% | \$ | 258,254 | \$ | 33,092 | | | | |
| 6 Total for Residential Conservation Programs | 47,296 | 489,320,775 | \$ | 56,559,056 | | \$ | 15,390,941 | \$ | 2,347,877 | | | | |
| | | | | | Allocation based on peak demand ⁽¹⁾ | | | | | | | | |
| 7 Total DSM Programs (at 75% Avoided Cost) Line 18 | 482,629 | | \$ | 25,426,704 | 10.77890% | \$ | 2,740,719 | | | | | | |
| | | | Syste Rever | m Avoided Cost nue Requirement | SC Allocation Factor | SC I A | Non-Resideptial voided Costs | SC Non | -Residential Lost Revenues | | | | |
| | System kW - Summer Peak | System Energy Reduction (kWh) | | | Allocation based on kWh sales | | A * B | | | | | | |
| Non-Residential Programs | | | | | | | | | | | | | |
| EE Brograms (at EE% Avoided Cost) | | | | | | | | | | | | | |
| E Flogranis (at 55% Avoideu Cost) | 10.070 | 40 803 360 | ć | 9 709 450 | 27 212160/ | ć | 2 260 760 | ć | 207.052 | | | | |
| 9 Smart Saver® for Non-Residential Customers Motors | 591 | 40,853,205 | ڊ خ | 933 555 | 27.21210// | د د | 2,309,700 | ې د | 15 507 | | | | |
| 10 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) | - | 434 | Ś | 55,555 | 27.21216% | Ś | 15 | Ś | - | | | | |
| 11 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products | 161 | 832.464 | ŝ | 211.435 | 27.21216% | ŝ | 57.536 | Ś | 2.376 | | | | |
| 12 Smart Saver [®] for Non-Residential Customers - HVAC | 1,672 | 3,984,941 | \$ | 1,910,402 | 27.21216% | \$ | 519,862 | \$ | 18,159 | | | | |
| 13 Smart Saver [®] for Non-Residential Customers - Custom Rebate | 2,596 | 20,892,129 | \$ | 3,651,902 | 27.21216% | \$ | 993,761 | \$ | 52,100 | | | | |
| 14 Total for Non-Residential Conservation Programs | 15,090 | 69,721,312 | \$ | 15,415,808 | | \$ | 4,194,974 | \$ | 385,194 | | | | |
| | | | | | Allocation based on peak demand ⁽¹⁾ | | | | | | | | |
| 15 Total DSM Programs (at 75% Avoided Cost) Line 18 | 482,629 | | \$ | 25,426,704 | 14.3449900% | \$ | 3,647,458 | | | | | | |
| DSM Program Breakdown | | | | 75% | Allocation based on System Retail Peak Demand | | | | | | | | |
| v | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 16 Power Manager (Residential) | 231,882 | - | | 13,576,883 | | | | | | | | | |
| 16 Power Manager (Residential) 17 Power Share (Non-Residential) | 231,882 250,747 | - | | 13,576,883 11,849,821 | | | | | | | | | |

Duke Energy Carolinas DSM/EE Vintage 1 True Up for the Period February 1, 2010 to December 31, 2010

Load Impact, Costs and Lost Revenues by Program

(1)Total System DSM programs allocated to Residential and Non-Residential based on contribution to retail system peak.

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

| In re: |) |
|---|------------------------------|
| |) DUKE ENERGY CAROLINAS, |
| Application of Duke Energy Carolinas, LLC |) LLC'S REQUEST FOR APPROVAL |
| For Approval of Rider 3 |) OF RIDER 3 |
| |) |

Exhibit 3

Vintage 1 True-Up – Existing DSM Program Costs

Duke Energy Carolinas DSM/EE Vintage 1 True Up for the Period February 1, 2010 to December 31, 2010 Existing DSM Program Costs

V1

Exhibit 3

| | | | | Y | ear 2010 | | |
|---|----------------------------------|----|-----------|-----------|-----------|-----------|--------------|
| 1 Estimated total IS/SG credits to be paid for native load programs | Line 8 | \$ | 8,977,844 | | | | |
| | | | | Re | sidential | Non | -residential |
| 2 SC retail allocation factor - system peak demand | Exhibit 11, Col D, Lines 6 and 7 | | | 10.18483% | | 13.55438% | |
| | | | | | | | |
| 3 SC retail share IS/SG program costs | Line 1 * Line 2 | | | \$ | 914,378 | \$ | 1,216,891 |

| | Feb - Dec 2010 Credits | |
|---|------------------------|--|
| PROGRAM | Paid | |
| 4 INTERRUPTIBLE SERVICE CREDITS | 5,551,645 | |
| 5 STANDBY GENERATOR PAYMENTS | 2,061,639 | |
| 6 WHOLESALE A/C LOAD CONTROL CREDITS | 614,944 | |
| 7 WHOLESALE INTERRUPTIBLE SERVICE CREDITS | 749,616 | |
| 8 TOTAL CREDITS | 8,977,844 | |

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

| In re: |) |
|---|------------------------------|
| |) DUKE ENERGY CAROLINAS, |
| Application of Duke Energy Carolinas, LLC |) LLC'S REQUEST FOR APPROVAL |
| For Approval of Rider 3 |) OF RIDER 3 |
| |) |

Exhibit 4

Vintage 1 True-Up – Allocation Factors

Duke Energy Carolinas DSM/EE Vintage 1 True Up February 1, 2010 - December 31, 2010 Allocation Factors

V1 Exhibit 4

| | | Α | В | С | | |
|--|--------------------------------|------------|-------------------------|---------------------|------------------------|----------------------|
| | | | | SC Retail Res/Non | | |
| SAW Sales Allocator | | MWH | SC Retail % (1) | Res% (2) | | |
| 1 NC RetailMWH Sales Allocation | 2010 COS Study | 57,382,346 | | | | |
| 2 SC Retail MWH Sales Allocation Residential | 2010 COS Study | 7,148,319 | | 33.28438% | | |
| 3 SC Retail MWH Sales Allocation Non-Residential | 2010 COS Study | 14,328,176 | | 66.71562% | | |
| 4 SC Retail MWH Sales Allocation | 2010 COS Study | 21,476,495 | 27.21216% | | | |
| 5 Greenwood Retail MWH Sales Allocation | 2010 COS Study | 63,588 | | | | |
| 6 Total Retail | Sum Lines 1 through 3 + Line 5 | 78,922,429 | | | | |
| | (1) Col. A Line 4 / Line 6 | | | | | |
| | (2) Col. A Line 2 or 3/ Line 4 | | | | | |
| | | А | В | с | D | E |
| | | | SC Retail Res / | CC D + + - 1 0((2) | SC Retail Res / NonRes | Res vs. NonRes Split |
| Demand Allocators | | IVI VV | NonRes % for SAW (1) | SC Retail % (2) | % for Existing DSM (3) | (4) |
| 7 NC Peak Demand | 2010 COS Study | 11,932,643 | | | | |
| 8 SC Residential Peak Demand | 2010 COS Study | 1,719,773 | 10.77890% | | 10.18483% | 42.90299% |
| 9 SC Non-Residential Peak Demand | 2010 COS Study | 2,288,743 | 14.34499% | 25.12389% | 13.55438% | 57.09701% |
| 10 Greenwood Peak Demand | 2010 COS Study | 13,841 | | | | |
| 11 Total Retail Peak Demand | Sum Lines 5 through 8 | 15,955,000 | | | | |
| 12 Wholesale Peak Demannd | 2010 COS Study | 930,640 | | | | |
| 13 Total System Peak Demand | Line 9 + Line 10 | 16,885,640 | | | | |

(1) Col. A, Line 6 or 7/ Line 9 (2) Col B Line 6 + Line 7 (3) Col A Line 6 or 7 / Line 11 (4) Col B, Line 6 or 7 / Col C, Line 7

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

| In re: |) |
|---|------------------------------|
| |) DUKE ENERGY CAROLINAS, |
| Application of Duke Energy Carolinas, LLC |) LLC'S REQUEST FOR APPROVAL |
| For Approval of Rider 3 |) OF RIDER 3 |
| | |

Exhibit 5

Vintage 1 True-Up – Forecasted kWh Sales

Duke Energy Carolinas DSM/EE Vintage 1 True Up for the Period February 1, 2010 to December 31, 2010 Forecasted kWh Sales for Rate Period

SACE 1st Response to Staff 011238 V1 Exhibit 5

| Tot | tal 2012 | Jan_12 | Feb_12 | Mar_12 | Apr_12 | May_12 | Jun_12 | Jul_12 | Aug_12 | Sep_12 | Oct_12 | Nov_12 | Dec_12 |
|---------------------------------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Fall 2010 Sales Forecast - kWhs | 3 | | | | | | | | | | | | |

South Carolina Retail:

| 1 Residential | 6,648,984,059 | 698,153,386 | 625,553,570 | 521,089,853 | 439,681,932 | 419,404,729 | 535,238,823 | 647,394,210 | 680,354,494 | 625,031,806 | 435,193,207 | 424,117,677 | 597,770,373 |
|-------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 2 General | 5,929,276,816 | 477,414,091 | 462,475,453 | 435,926,435 | 449,673,137 | 462,620,570 | 529,608,857 | 561,663,599 | 577,743,776 | 574,804,546 | 488,575,032 | 447,456,480 | 461,314,838 |
| 3 Industrial | 7,573,258,886 | 584,533,085 | 632,580,859 | 567,701,002 | 634,996,695 | 631,689,309 | 662,193,705 | 641,612,861 | 687,498,896 | 678,809,328 | 620,860,227 | 646,652,644 | 584,130,275 |
| 4 Textile | 1,114,936,694 | 85,596,007 | 97,684,173 | 85,840,144 | 97,083,400 | 98,928,936 | 99,433,115 | 88,637,106 | 105,485,112 | 98,975,267 | 88,664,753 | 90,379,978 | 78,228,702 |
| 5 Other | 44,556,913 | 3,738,639 | 3,688,697 | 3,684,305 | 3,694,165 | 3,690,877 | 3,740,394 | 3,672,293 | 3,777,079 | 3,721,110 | 3,541,657 | 3,871,445 | 3,736,253 |
| 6 Total Non-Residential | 14,662,029,308 | 1,151,281,822 | 1,196,429,181 | 1,093,151,885 | 1,185,447,398 | 1,196,929,693 | 1,294,976,071 | 1,295,585,860 | 1,374,504,863 | 1,356,310,251 | 1,201,641,669 | 1,188,360,547 | 1,127,410,068 |
| | | | | | | | | | | | | | |
| 7 Total Retail | 21.311.013.368 | 1.849.435.208 | 1.821.982.751 | 1.614.241.738 | 1.625.129.330 | 1.616.334.421 | 1.830.214.894 | 1.942.980.070 | 2.054.859.356 | 1.981.342.058 | 1.636.834.877 | 1.612.478.224 | 1,725,180,440 |

Adjusted SC Retail Sales Forecast (excludes Greenwood sales)

| 8 | Residential | 6,648,984,059 | |
|----|-----------------------------|---------------|---------|
| 9 | Factor to exclude Greenwood | 99.2676% | Line 26 |
| 10 | Residential sales excl GW | 6,600,286,497 | |

| 11 | Non-Residential | 14,662,029,308 | |
|----|-------------------------------|----------------|---------|
| 12 | Factor to exclude Greenwood | 99.9244% | Line 29 |
| 13 | Non-Residential sales excl GW | 14,650,937,965 | |

Opt Out Sales

| | | 2010 kWh Usage |
|----|-------------------|--------------------|
| | Vintage 1 Opt Out | |
| 14 | DSM YR1 | 5,891,923,382 |
| 15 | EE YR1 | 4,905,041,586 |
| | Vintage 2 Opt Out | |
| 16 | DSM YR2 | 5,918,617,543 |
| 17 | EE YR2 | 5,305,637,349 |
| 18 | Vintage 3 Opt Out | Use V2 as estimate |

Non-Residental Forecast Sales Less Opt Out

| | V1 EE Rate Components | V1 DSM Rate Components | V2 and V3 EE Rate Components ⁽¹⁾ | V3 DSM Rate Components ⁽¹⁾ |
|--------------------------------|--------------------------|---------------------------|---|--|
| 19 Total Non-Residential | 14,650,937,965 | 14,650,937,965 | 14,650,937,965 | 14,650,937,965 |
| 20 Less V1 EE Opt Out | 4,905,041,586 | | | |
| 21 Less V1 DSM Opt Out | | 5,891,923,382 | | |
| 22 Less V2 EE Opt Out | | | 5,305,637,349 | |
| 23 Less V2 DSM Opt Out | | | | 5,918,617,543 |
| 24 Sales for Rider Calculation | 9,745,896,379 | 8,759,014,583 | 9,345,300,616 | 8,732,320,422 |

| FACTOR TO EXCLUDE GREENWOOD SALES FROM FORECAST: | | | | | | | | | | |
|--|------------|----------------------------|--|--|--|--|--|--|--|--|
| | 2010 MWH | Percent to Total | | | | | | | | |
| 25 Total SC Residential sales | 7,201,060 | | | | | | | | | |
| 26 Greenwood residential sales | 52,741 | | | | | | | | | |
| 27 SC Residential excl GW | 7,148,319 | 99.2676% Line 27 / Line 25 | | | | | | | | |
| 28 Total SC Non-Residential sales | 14,339,023 | | | | | | | | | |
| 29 Greenwood non-residential sales | 10,847 | | | | | | | | | |
| 30 SC Non-Residential excl GW | 14,328,176 | 99.9244% Line 30 / Line 28 | | | | | | | | |
| 31 Total SC Retail Sales | 21,540,083 | | | | | | | | | |
| 32 Greenwood sales | 63,588 | | | | | | | | | |
| 33 Total SC Sales excl GW | 21,476,495 | | | | | | | | | |

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

| In re: |) |
|---|------------------------------|
| |) DUKE ENERGY CAROLINAS, |
| Application of Duke Energy Carolinas, LLC |) LLC'S REQUEST FOR APPROVAL |
| For Approval of Rider 3 |) OF RIDER 3 |
| |) |

Exhibit 6

Vintage 1 True-Up - Earnings Cap Calculation

Duke Energy Carolinas

DSM/EE Vintage 1 True Up for the Period February 1, 2010 to December 31, 2010

Earnings Cap Calculation

| V1 |
|-----------|
| Exhibit 6 |

| | | | Α | | В | | с | | D | | E | | F | G | |
|---|---------------------------------|-------------------|----------------------|----------|------------|-------|-------------|---|-------------|----|---------------|-------|-------------|--------------|---|
| Total for Conservation Programs | | 55% | Res | | Non Res | | Total | | | | | | | | |
| 1 AC Revenues-55% | Exhibit 2, Lines 6 and 14 | \$ | 56,559,056 | \$ | 15,415,808 | \$ | 71,974,864 | | | | | | | | |
| | Exhibit 7, Line 9, Col A * Ex | hibit | | | | | | | | | | | | | |
| | 7, Line 10, Col E Res or Col | F Non- | | | | | | | | | | | | | |
| 2 Program Costs | Res | \$ | 29,669,938 | \$ | 9,357,347 | \$ | 39,027,285 | | | | | | | | |
| 3 Avoided Costs -100% | Line 1 / 55% | \$ | 102,834,647 | \$ | 28,028,742 | \$ | 130,863,389 | | | | | | | | |
| 4 Income Before Taxes | Line 1 - Line 2 | \$ | 26,889,118 | \$ | 6,058,461 | \$ | 32,947,579 | | | | | | | | |
| 5 Income Taxes | Line 4 * .39176 | \$ | 10,534,081 | \$ | 2,373,463 | \$ | 12,907,544 | | | | | | | | |
| 6 Net Income | Line 4 - Line 5 | \$ | 16,355,037 | \$ | 3,684,998 | \$ | 20,040,035 | | | | | | | | |
| Total for DSM Programs | | 75% | Res | | Non Res | | Total | | | | | | | | |
| 7 AC Revenues-75% | Exhibit 2, Lines 16 and 17 | \$ | 13,576,883 | \$ | 11,849,821 | \$ | 25,426,704 | | | | | | | | |
| | Exhibit 7, Line 14, Col A * E | xhibit | | | | | | | | | | | | | |
| | 7, Line 15, Col E Res or Col | F Non- | | | | | | | | | | | | | |
| 8 Program Costs | Res | \$ | 7,250,154 | \$ | 9,648,795 | \$ | 16,898,949 | | | | | | | | |
| 9 Avoided Costs -100% | Line 7 / 75% | \$ | 18,102,511 | \$ | 15,799,761 | \$ | 33,902,272 | | | | | | | | |
| 10 Income Before Taxes | Line 7 - Line 8 | \$ | 6,326,729 | \$ | 2,201,026 | \$ | 8,527,755 | | | | | | | | |
| 11 Income Taxes | Line 10 * .39176 | \$ | 2,478,559 | \$ | 862,274 | \$ | 3,340,833 | | | | | | | | |
| 12 Net Income | Line 10 - Line 11 | \$ | 3,848,169 | \$ | 1,338,752 | \$ | 5,186,922 | | | | | | | | |
| | | | | | | | | | | Pe | rcent of Tota | al Av | oided Costs | | |
| | | | | | | | | | | | Non- | | Non Por | | |
| | | | | | | | | R | Residential | R | esidential | 0 | nservation | Non-Res DSI | M |
| Total for SAW Programs Adjusted for DSM Cap | | Res | | Non | Res | Total | | | | | Total | | | | |
| 13 AC Revenues | Line 1 + Line 7 | \$ | 70,135,939 | \$ | 27,265,629 | \$ | 97,401,568 | | | | | | | | |
| 14 Program Costs | Line 2 + Line 8 | \$ | 36,920,092 | \$ | 19,006,142 | \$ | 55,926,234 | | | | | | | | |
| 15 Avoided Costs | Line 3 + Line 9 | \$ | 120,937,158 | \$ | 43,828,503 | \$ | 164,765,661 | | 73% | | 27% | | 57% | 43 | % |
| 16 Income Before Taxes | Line 13 - Line 14 | \$ | 33,215,847 | \$ | 8,259,487 | \$ | 41,475,334 | | | | | | | | |
| 17 Income Taxes | Line 6 * .39176 | \$ | 13,012,640 | \$ | 3,235,737 | \$ | 16,248,377 | | | | | | | | |
| 18 Net Income | Line 16 - Line 17 | \$ | 20,203,207 | \$ | 5,023,750 | \$ | 25,226,957 | | | | | | | | |
| 19 Percent DSM Avoided Cost to Total Avoided Cost (A) | Line C9 / Line C15 | | | | | | 21% | | | | | | | | |
| 20 Percent Conservation Avoided Cost to Total Avoided Cost | Line C3 / Line C15 | | | | | | 79% | | | | | | | | |
| 21 Earnings Cap: Allowed Return on Program Costs | Line 14. Col. C * 15% | | | | | Ś | 8.388.935 | | | | | | | | |
| 22 Earnings in Excess of Allowed Return on Program Costs | Line 18. Col C - Line 21. Col C | - | | | | Ś | 16.838.022 | | | | | | | | |
| 23 SC Allocation (weighted demand and sales allocators) | (Exhibit 2, Line 8 Col B * Line | - 20) + (Exhib | oit 2. Line 18 Col B | * Line 1 | 9) | Ŧ | 26.7825% | | | | | | | | |
| 24 Excess Farnings to reduce V1 Revenue Requirement | Line 22 * Line 23 | | | | , | Ś | 4.509.639 | | | | | | | | |
| 25 Excess Earnings by Customer Class and Type | Line 24 * Line 15 Col D Col | F. (Col F * Co | DIF) (COLF * COLG) |) | | Ŷ | 1,000,000 | Ś | 3 310 052 | Ś | 1 199 587 | Ś | 678 238 61 | \$ 521 348 3 | 6 |
| 26 Gross Up of Earnings to Pre-Tax | Line 25 / (139176) | _, ,00.2 00 | | , | | | | Ś | 5.442.017 | Ś | 1.972.226 | Ś | 1.115.084 | \$ 857.14 | 3 |
| 27 Gross up of Pre-Tax Farnings for Gross Receipts Tax and Regulatory | 2 23 / (1 .331/0) | | | | | | | Ŷ | 3,772,017 | Ŷ | 1,5,2,220 | Ŷ | 2,110,004 | ÷ 037,14 | 5 |
| Fee | Line 26 * 1 004581 | | | | | | | Ś | 5 466 947 | Ś | 1 981 261 | Ś | 1 120 102 | \$ 861.06 | 9 |
| | Line 20 1.004301 | | | | | | | Ŷ | 5,400,547 | Ļ | 1,501,201 | Ŷ | 1,120,192 | ÷ 001,00 | 5 |

(A) No Adjustment required since DSM avoided costs percent is less than 40%

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

| In re: |) |
|---|------------------------------|
| |) DUKE ENERGY CAROLINAS, |
| Application of Duke Energy Carolinas, LLC |) LLC'S REQUEST FOR APPROVAL |
| For Approval of Rider 3 |) OF RIDER 3 |
| | |

Exhibit 7

Vintage 1 True-Up – Actual Program Costs

V1 Exhibit 7

Duke Energy Carolinas DSM/EE Cost Recovery Vintage 1 True Up February 1, 2010 - December 31, 2010 Actual Program Costs

| | Α | В | С | D | E | F | |
|---|---|--|-----------------|---------------|-------------|-----------------|-----------------|
| | System Costs Month of February 1, 2010 - | SC 2010 Allocation Factor Retail | 2010 SC | Residential % | | Non-Residential | |
| | December 31, 2010 | kWh Sales | Allocated Costs | (Exh. 4) | Residential | % (Exh. 4) | Non-Residential |
| Energy Efficiency (EE) Programs: | | | | | | • • | |
| 1 Residential Energy Assessments | 2,411,528 | | 656,229 | | 656,229 | | |
| 2 Home Energy Comparison Report | 17,037 | | 4,636 | | 4,636 | | |
| 3 Residential Smart Saver | 23,688,748 | | 6,446,220 | | 6,446,220 | | |
| 4 Low Income Services | 383,485 | | 104,355 | | 104,355 | | |
| 5 Energy Efficiency Education Schools Program | 1,981,600 | | 539,236 | | 539,236 | | |
| 6 Nonresidential Energy Assessments | 963,622 | | 262,222 | | | | 262,222 |
| 7 Nonresidential Smart Saver | 6,013,406 | | 1,636,378 | | | | 1,636,378 |
| 8 Oversight of EE programs | 3,567,859 | | 970,891 | 33.28438% | 323,155 | 66.71562% | 647,736 |
| 9 Subtotal EE Program Costs | 39,027,285 | 27.21216% | 10,620,167 | | 8,073,831 | | 2,546,336 |
| 10 Res vs. Non-Res Split | | | 100% | | 76% | | 24% |
| | | | | | | | |
| | | SC 2010 | | | | | |
| | | Allocation | | | | | |
| | | Factor Peak | | | | | |
| | | Demand | | | | | |
| Demand-Side Management (DSM) Programs: | | | | | | | |
| 11 Power Manager | 8,623,054 | | 2,166,447 | | | | |
| 12 Power Share | 7,059,562 | | 1,773,637 | | | | |
| 13 Oversight of DSM programs | 1,216,333 | | 305,590 | | | | |
| 14 Subtotal DSM Program Costs | 16,898,949 | 25.12389% | 4,245,673 | 42.90299% | 1,821,521 | 57.09701% | 2,424,153 |
| 15 Res vs. Non-Res Split | | | 100% | | 43% | | 57% |
| 16 Total EE & DSM Program Costs | 55,926,234 | | 14,865,841 | = | 9,895,352 | - · | 4,970,489 |
| 17 Total EE & DSM Program Costs - Vintage 1 | 55,926,234 | | | | | | |

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

| In re: |) |
|---|------------------------------|
| |) DUKE ENERGY CAROLINAS, |
| Application of Duke Energy Carolinas, LLC |) LLC'S REQUEST FOR APPROVAL |
| For Approval of Rider 3 |) OF RIDER 3 |
| |) |

Exhibit 8

Vintage 1 True-Up – EE Rider Revenue Collected

SACE 1st Response to Staff 011244

V1 Exhibit 8

Duke Energy Carolinas DSM/EE Vintage 1 True Up for the Period February 1, 2010 to December 31, 2010 EE Rider Revenue Collected

| | February 2010 | March 2010 | <u>April 2010</u> | <u>May 2010</u> | June 2010 | <u>July 2010</u> | August 2010 | September 2010 | October 2010 | November 2010 | December 2010 | Total 11 Months |
|---|-------------------------|---------------------------|-------------------------|-------------------------|-------------------------|------------------------------|------------------------|---------------------------|-------------------------|-------------------------|---------------------------|------------------|
| Residential Rider Total Rate * Total Residential Revenue | 0.1736 \$ 524,312.54 | 0.1736 \$ 1,043,840.38 | 0.1736 \$ 767,083.87 | 0.1736 \$ 686,025.78 | 0.1736 \$ 993,009.23 | 0.1736 \$ 1,323,781.93 \$ | 0.1736 1,285,478.20 | 0.1736 \$ 1,128,427.34 | 0.1736 \$ 744,564.88 | 0.1736 \$ 704,073.25 | 0.1736 \$ 1,157,055.17 | \$ 10,357,652.57 |
| kwh | 302,023,353 | 601,290,541 | 441,868,589 | 395,176,141 | 572,009,925 | 762,547,195 | 740,482,834 | 650,015,749 | 428,896,820 | 405,572,149 | 666,506,434 | 5,966,389,729 |
| | | | | | | | | | | | | |
| Non-Residential EE Rate * | 0.0195 | 0.0195 | 0.0195 | 0.0195 | 0.0195 | 0.0195 | 0.0195 | 0.0195 | 0.0195 | 0.0195 | 0.0195 | |
| Non-Residential DSM Rate * | 0.0360 | 0.0360 | 0.0360 | 0.0360 | 0.0360 | 0.0360 | 0.0360 | 0.0360 | 0.0360 | 0.0360 | 0.0360 | |
| Non-Residential EE Revenue | \$ 75,373.12 | \$ 177,984.08 | \$ 143,849.74 | \$ 140,334.14 | \$ 165,767.22 | \$ 171,228.29 \$ | 182,503.10 | \$ 175,224.61 | \$ 137,498.37 | \$ 140,431.53 | \$ 147,645.31 | \$ 1,657,839.51 |
| Non-Residential DSM Revenue | \$ 136,768.01 | \$ 325,716.68 | \$ 237,897.79 | \$ 234,354.29 | \$ 265,383.73 | \$ 286,220.41 \$ | 298,130.74 | \$ 291,379.56 | \$ 248,911.72 | \$ 229,812.65 | \$ 243,239.79 | \$ 2,797,815.37 |
| kWh - EE participants | 386,528,821 | 912,738,872 | 737,690,974 | 719,662,256 | 850,088,308 | 878,093,795 | 935,913,333 | 898,587,744 | 705,119,846 | 720,161,692 | 757,155,436 | 8,501,741,077 |
| kWh - DSM participants | 379,911,139 | 904,768,556 | 660,827,194 | 650,984,139 | 737,177,028 | 795,056,694 | 828,140,944 | 809,387,667 | 691,421,444 | 638,368,472 | 675,666,083 | 7,771,709,361 |
BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

| In re: |) |
|---|------------------------------|
| |) DUKE ENERGY CAROLINAS, |
| Application of Duke Energy Carolinas, LLC |) LLC'S REQUEST FOR APPROVAL |
| For Approval of Rider 3 |) OF RIDER 3 |
| | |

Exhibit 9

Vintage 3 – Calculation of Prospective Amount

SACE 1st Response to Staff 011246

V3 Exhibit 9

Duke Energy Carolinas DSM/EE Cost Recovery Rider 3 Calculation of EE Rider 3 Prospective Amounts

Exhibit 10, Col F, Line 6 Exhibit 10, Col F, Line 7

Exhibit 12, Line 3 Residential Line 9 + Line 10

Line 1 + Line 2

Line 5 + Line 6

Line 7 * Line 8

Exhibit 14, Line 10

(Line 13 / Line 14) *100

Exhibit 11, Line 14

RESIDENTIAL

| 1 | EE Avoided Cost Component |
|----|--|
| 2 | DSM Avoided Cost Component |
| 3 | Residential Avoided Cost Revenue Requirement |
| 6 | Total Lost Revenues |
| 7 | Residential Save-A-Watt Revenue Requirement |
| 8 | Billing Factor |
| 9 | Residential Save-A-Watt Revenue Requirement for Billing |
| 10 | Residential Existing DSM Program Revenue Requirement |
| 11 | Total Residential SAW & Existing DSM Program Revenue Requireme |
| | |

11 Total Residential SAW & Existing DSM Program Revenue Requirement 12 Projected SC Residential Sales (kWh) for rate period

13 Residential Rider EE (cents per kWh)

NON-RESIDENTIAL

| | | Vinta Parti | ge 1 EE cipant | Vintage 2 EE Participant | | Vintage 3 EE Participant | t | | Vintage 3 DSM Participa | | | |
|---|--|---------------------------|-------------------------------|--|------------------------------|---|--|---------------------|-------------------------|--|--------------------|----------------------------|
| | | Vintage 2 Rev Requi | 1 SC Retail enue rement | Vintage 2 SC Retail Revenue Requirement | Vintage 3 SC Retail Costs | Gross Receipts Tax and Regulatory Fee Factor | Vintage 3 SC Retail Revenue Requirement | Vintage 3 S Cost | C Retail | Gross Receipts Tax and Regulatory Fee Factor | Vintage Revenue | 3 SC Retail Requirement |
| 16 SAW EE Avoided Cost Revenue Requirement | Exhibit 10, Col F, Line 14 | | | | \$ 5,134,457 | 1.004581 | \$ 5,157,977 | | | | | |
| 17 Lost Revenues Vintage 1 | Exhibit 11, Line 32 | \$ | 60,431 | | | | | | | | | |
| 18 Lost Revenues Vintage 2 | Exhibit 11, Line 32 | | | \$ 569,902 | | | | | | | | |
| 19 Lost Revenues Vintage 3 | Exhibit 11, Line 32 | | | | | | \$ 284,209 | | | | | |
| 20 Billing Factor | | | 100% | 85% | | | 85% | | | | | |
| 21 Total NonResidential EE Revenue Requirement | (Lines 16 through 19) * Line 20 | \$ | 60,431 | \$ 484,417 | | | \$ 4,625,858 | | | | | |
| 22 SAW DSM Avoided Cost Component 23 Billing Factor | Exhibit 10, Col F, Line 15 | | | | | | | \$ 6,0 | 37,256 | 1.004581 | \$ | 6,064,913 85% |
| 24 Total SAW DSM Avoided Cost Component | Line 22 * Line 23 | | | | | | | | | | \$ | 5,155,176 |
| 25 Existing DSM Program Revenue Requirement | Exhibit 12, Line 3 Non-residential | | | | | | | \$ 1,3 | 15,689 | 1.004581 | \$ | 1,321,716 |
| 26 Total Non-Residential DSM Revenue Requirement | Line 24 + Line 25 | | | | | | | | | | \$ | 6,476,892 |
| Projected Vintage 1 EE Participants SC Non-Residential Sales (kWh) for rate | | | | | | | | | | | | |
| 27 period Projected Vintage 2 EE Participants SC Non-Residential Sales (kWh) for rate | Exhibit 14, Line 24 | 9,74 | 5,896,379 | | | | | | | | | |
| 28 period Projected Vintage 3 EE Participants SC Non-Residential Sales (kWh) for rate | Exhibit 14, Line 24 | | | 9,345,300,616 | | | | | | | | |
| 29 period Projected Vintage 3 DSM Participants SC Non-Residential Sales (kWh) for rate | Exhibit 14, Line 24 | | | | | | 9,345,300,616 | | | | | |
| 30 period | Exhibit 14, Line 24 | | | | | | | | | | ٤ | 3,732,320,422 |
| | Line 21 / (Applicable Sales from Lines | | | | | | | | | | | |
| 31 Non-Residential Rider EE Amounts (cents per kWh) | 27 through 29) * 100 | | 0.0006 | 0.0052 | | | 0.0495 | | | | | |
| 32 Non-Residential Rider DSM Amounts (cents per kWh) | Line 26 / Line 30 * 100 | | | | | | | | | | | 0.0742 |

| Vinta | ge 3 SC Retail Costs | Gross Receipts Tax and Regulatory Fee Factor | Vintage 3 SC Retail Revenue Requirement | | | | | | |
|-------|-------------------------|---|--|---------------|--|--|--|--|--|
| \$ | 3,638,628 | | | | | | | | |
| \$ | 4,536,426 | | | | | | | | |
| \$ | 8,175,053 | 1.004581 | | 8,212,503 | | | | | |
| | | | \$ | 8,355,751 | | | | | |
| | | | | 16,568,254 | | | | | |
| | | | | 85% | | | | | |
| | | | \$ | 14,083,016 | | | | | |
| \$ | 988,615 | 1.004581 | \$ | 993,144 | | | | | |
| | | | \$ | 15,076,160 | | | | | |
| | | | | 6,600,286,497 | | | | | |
| | | | | 0.2284 | | | | | |

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

| In re: |) |
|---|------------------------------|
| |) DUKE ENERGY CAROLINAS, |
| Application of Duke Energy Carolinas, LLC |) LLC'S REQUEST FOR APPROVAL |
| For Approval of Rider 3 |) OF RIDER 3 |
| | |

Exhibit 10

Vintage 3 – Load Impacts, Avoided Costs Revenue Requirements and Lost Revenues by Program

V3 Exhibit 10

Duke Energy Carolinas DSM/EE Vintage 3 Estimate for the Period January 1, 2012 to December 31, 2012 Load Impact, Costs and Lost Revenues by Program

| | | | | | А | | В | | С | D | | E | | F | | G |
|--|---------|----------------------------|---------------------------|----------------------|------------|--|------------|----------------------|----------------|-------------------------------|---------------------------------|-----------|---------------------------------|-----------|---------------------------------|-----------------|
| | | 9 | | System Program Costs | | System Avoided Cost Revenue Requirement | | System Lost Revenues | | SC Allocation Factor | SC Residential Program Costs | | SC Residential Avoided Costs | | SC Residential Lost Revenues | |
| | | System kW - Summer Peak | Energy Reduction (kWh) | | | | | Net c | f Variable O&M | Allocation based on kWh sales | | A * D | | B * D | See Ext | ibit 11 Support |
| Residential Programs | | | | | | | | | | | | | | | | |
| EE Programs (at 55% Avoided Cost) | | | | | | | | | | | | | | | | |
| 1 Residential Energy Assessments | | 1,072 | 6,452,746 | \$ | 2,532,321 | \$ | 1,115,656 | \$ | 608,709 | 27.212160% | \$ | 689,099 | \$ | 303,594 | \$ | 173,184 |
| 2 Home Energy Comparison Report | | 7,031 | 37,897,145 | \$ | 1,673,494 | \$ | 1,222,764 | \$ | 3,068,458 | 27.212160% | \$ | 455,394 | \$ | 332,740 | \$ | 3,068,458 |
| 3 Smart Saver® for Residential Customers | | 7,633 | 72,025,566 | \$ | 7,827,013 | \$ | 9,344,037 | \$ | 16,840,668 | 27.212160% | \$ | 2,129,899 | \$ | 2,542,714 | \$ | 4,952,709 |
| 4 Low Income Energy Efficiency and Weatherization Assistance | | 58 | 447,655 | \$ | 1,094,268 | \$ | 143,436 | \$ | 17,663 | 27.212160% | \$ | 297,774 | \$ | 39,032 | \$ | 8,869 |
| 5 Energy Efficiency Education Program for Schools | _ | 2,177 | 7,147,368 | \$ | 1,509,296 | \$ | 1,545,437 | \$ | 542,587 | 27.212160% | \$ | 410,712 | \$ | 420,547 | \$ | 152,530 |
| 6 Total for Residential Conservation Programs | | 17,970 | 123,970,480 | \$ | 14,636,392 | \$ | 13,371,330 | \$ | 21,078,086 | | \$ | 3,982,879 | \$ | 3,638,628 | \$ | 8,355,751 |
| | | | | | | | | | | Allocation based on peak | | | | | | |
| | | | | | | | | | | demand ⁽¹⁾ | | | | | | |
| 7 Total DSM Programs (at 75% Avoided Cost) | Line 18 | 666,683 | | \$ | 34,940,055 | \$ | 42,086,165 | | | 10.7789000% | \$ | 3,766,154 | \$ | 4,536,426 | | |

| | | | | Syste | System Program Costs | | ystem Avoided Cost evenue Requirement | System Lost Revenues | | SC Allocation Factor | SC Non-Residential Program Costs | | SC Non-Residential Avoided Costs | | SC Non-Residential Los Revenues | |
|---|-------------------------|----------------------------|---------------------------|-------|----------------------|----|--|----------------------|-----------------|---|-------------------------------------|-----------|-------------------------------------|------------|------------------------------------|-----------------|
| | | System kW - Summer Peak | Energy Reduction (kWh) | | | | | Net | of Variable O&M | Allocation based on kWh sales | | A * D | | B * D | See Exh | ibit 11 Support |
| Non-Residential Programs | | | | | | | | | | | | | | | | |
| EE Programs (at 55% Avoided Cost) | | | | | | | | | | | | | | | | |
| 8 Smart Saver [®] for Non-Residential Customers Lighting | | 9,653 | 58,234,477 | \$ | 3,996,436 | \$ | 11,893,695 | \$ | 2,325,391 | 27.212160% | \$ | 1,087,516 | Ś | 3,236,531 | Ś | 668,012 |
| 9 Smart Saver [®] for Non-Residential Customers Motors | | 303 | 2,692,228 | \$ | 167,638 | \$ | 572,824 | \$ | 92,603 | 27.212160% | \$ | 45,618 | \$ | 155,878 | \$ | 26,779 |
| 10 Smart Saver® for Non-Residential Customers - Other Prescript | ive (Process Equipment) | 3 | 15,406 | \$ | 452 | \$ | 2,001 | \$ | 579 | 27.212160% | \$ | 123 | \$ | 545 | \$ | 158 |
| 11 Smart Saver® for Non-Residential Customers - Energy Star Foc | d Service Products | 119 | 662,825 | \$ | 81,048 | \$ | 190,480 | \$ | 24,502 | 27.212160% | \$ | 22,055 | \$ | 51,834 | \$ | 6,964 |
| 12 Smart Saver® for Non-Residential Customers - HVAC | | 1,254 | 4,224,481 | \$ | 604,937 | \$ | 1,758,676 | \$ | 149,564 | 27.212160% | \$ | 164,616 | \$ | 478,574 | \$ | 42,662 |
| 13 Smart Saver® for Non-Residential Customers - Custom Rebate | 1 | 2,799 | 17,565,577 | \$ | 1,759,627 | \$ | 4,450,567 | \$ | 606,502 | 27.212160% | \$ | 478,833 | \$ | 1,211,095 | \$ | 169,967 |
| 14 Total for Non-Residential Conservation Programs | | 14,130 | 83,394,993 | \$ | 6,610,138 | \$ | 18,868,243 | \$ | 3,199,141 | | \$ | 1,798,761 | \$ | 5,134,457 | \$ | 914,542 |
| | | | | | | | | | | Allocation based on peak demand ⁽¹⁾ | | | | | | |
| 15 Total DSM Programs (at 75% Avoided Cost) | Line 18 | 666,683 | | \$ | 34,940,055 | \$ | 42,086,165 | | | 14.3449900% | \$ | 5,012,147 | \$ | 6,037,256 | | |
| | | | | | | | | | | Allocation based on System | | | | | | |
| DSM Program Breakdown | | | | | | | | | | Retail Peak Demand | | | | | | |
| 16 Power Manager (Residential) | | 333,879 | - | | 17,110,145 | | 21,077,014 | | | | | | | | | |
| 17 Power Share (Non-Residential) | | 332,804 | - | | 17,829,910 | | 21,009,151 | | | | | | | | | |
| 18 Total DSM | | 666,683 | | | 34,940,055 | | 42,086,165 | | | 25.1238900% | \$ | 8,778,301 | \$ | 10,573,682 | | |

(1)Total System DSM programs allocated to Residential and Non-Residential based on contribution to retail system peak.

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

| In re: |) |
|---|------------------------------|
| |) DUKE ENERGY CAROLINAS, |
| Application of Duke Energy Carolinas, LLC |) LLC'S REQUEST FOR APPROVAL |
| For Approval of Rider 3 |) OF RIDER 3 |
| | |

Exhibit 11

Vintage 3 – Lost Revenue

8,355,751

Duke Energy Carolinas DSM/EE Cost Recovery Rider 3 Lost Revenue Related to Period January 1, 2012 - December 31, 2012

V3 Exhibit 11

| | | | | e 1) | | | |
|--|--------------------|----|------------------|----------------------|---|----------------------|---|
| | | Y | <u>/ear 3 V1</u> | | Year 2 V2 | | Year 1 V3 |
| L Residential Energy Assessments | | \$ | 10,361 | | | | |
| 2 Residential Smart Saver | | \$ | 508,326 | | | | |
| 3 Low Income and Weatherization Assistance | | \$ | 5,581 | | | | |
| 1 Energy Efficiency Programs for Schools | | \$ | 6,706 | | | | |
| 5 Home Energy Comparison Report* | | \$ | - | \$ | 2,045,639 | \$ | 1,022,819 |
| 5 Total | otal | | | | 2,045,639 | \$ | 1,022,819 |
| | | | System Am | ount | Allocated to SC | Reta | il (Note 2) |
| | | Y | ear 3 V1 | | Year 2 V2 | Year 1 V3 | |
| 7 Residential Energy Assessments | | - | | Ś | 432,196 | Ś | 466 453 |
| Residential Smart Saver | | | | | - / | | 100.153 |
| | | | | Ś | 14.527.285 | Ś | 1.805.058 |
| Low Income and Weatherization Assistance | | | | \$ \$ | 14,527,285 | \$ \$ | 1,805,058 12.082 |
| Low Income and Weatherization Assistance Low Efficiency Programs for Schools | | | | \$ \$ \$ | 14,527,285 - 342,979 | \$ \$ \$ | 1,805,058 1,2,082 192,903 |
| Low Income and Weatherization Assistance Energy Efficiency Programs for Schools Total | | | | \$ \$ \$ \$ | 14,527,285 - 342,979 15,302,459 | \$ \$ \$ \$ | 1,805,058 12,082 192,903 2,176,195 |
| Description of the second secon | Exhibit 13, Line 2 | | | \$ \$ \$ | 14,527,285 - - 342,979 15,302,459 27.212160% | \$ \$ \$ \$ | 1,805,058 12,082 192,903 2,176,195 27.212160% |
| Dew Income and Weatherization Assistance Energy Efficiency Programs for Schools Total Allocation Factor Allocated Lost Revenues | Exhibit 13, Line 2 | | | \$ \$ \$ \$ | 14,527,285 - 342,979 15,302,459 27.212160% 4,164,130 | \$ \$ \$ \$ | 1,805,153 1,805,058 12,082 192,903 2,176,195 27.212160% 592,190 |

| | | | | 100% | 6 SC Retail (Note | e 1) | | |
|--|-----------------------|----------|-----------|------|------------------------------|------|------------|---|
| | | Y | ear 3 V1 | | | | | _ |
| 15 Smart Saver [®] for Non-Residential Customers Lighting | | \$ | 48,391 | | | | | |
| 16 Smart Saver® for Non-Residential Customers Pumps and M | Notors | \$ | 2,170 | | | | | |
| 17 Smart Saver® for Non-Residential Customers - Other Preso | criptive | \$ | - | | | | | |
| 18 Smart Saver® for Non-Residential Customers - Energy Star | Food Service Products | \$ | 408 | | | | | |
| 19 Smart Saver [®] for Non-Residential Customers - HVAC | | \$ | 2,696 | | | | | |
| 20 Smart Saver® for Non-Residential Customers - Custom Rel | pate | \$ | 6,767 | _ | | | | |
| 22 Total | | \$ | 60,431 | | | | | |
| | | <u> </u> | System Am | ount | Allocated to SC Year 2 V2 | кета | Year 1 V3 | |
| 23 Smart Saver® for Non-Residential Customers Lighting | | | | \$ | 1,531,058 | \$ | 745,942 | |
| 24 Smart Saver® for Non-Residential Customers Pumps and M | Notors | | | \$ | 62,621 | \$ | 27,812 | |
| 25 Smart Saver® for Non-Residential Customers - Other Preso | criptive | | | \$ | 378 | \$ | 201 | |
| 26 Smart Saver® for Non-Residential Customers - Energy Star | Food Service Products | | | \$ | 16,283 | \$ | 7,812 | |
| 27 Smart Saver® for Non-Residential Customers - HVAC | | | | \$ | 90,683 | \$ | 56,185 | |
| 28 Smart Saver® for Non-Residential Customers - Custom Rel | pate | | | \$ | 393,269 | \$ | 206,466 | _ |
| 29 Total | | | | \$ | 2,094,292 | \$ | 1,044,418 | |
| 30 Allocation Factor | Exhibit 20, Line 2 | | | | 27.212160% | | 27.212160% | |
| 31 Allocated Lost Revenues | | | | \$ | 569,902.08 | \$ | 284,208.73 | |
| 32 Total Non-Residential Lost Revenues | Line 22 + Line 31 | \$ | 60,431 | \$ | 569,902.08 | \$ | 284,209 | |

Note 1 - Vintage 1 lost revenues are SC state specific amounts; no allocation required. Note 2 - SC state specific lost revenue for Vintages 1 and 2 are estimated using an allocation of system amounts. Note 3 - Vintage 1 lost revenues included in Rider 3 are for January 31, 2012. New base rates effective February 1, 2012 incorporate remaining lost revenues associated with Vintage 1.

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

| In re: |) |
|---|------------------------------|
| |) DUKE ENERGY CAROLINAS, |
| Application of Duke Energy Carolinas, LLC |) LLC'S REQUEST FOR APPROVAL |
| For Approval of Rider 3 |) OF RIDER 3 |
| |) |

Exhibit 12

Vintage 3 – Existing DSM Program Costs for 2012

Duke Energy Carolinas DSM/EE Cost Recovery Rider 3 Existing DSM Program Costs for 2012

V3 Exhibit 12

| 1 Estimated total IS/SG credits to be paid for native load programs | Line 8 | \$ | 9,706,742 | | | | | |
|---|-----------------------------|----|-----------|------------|-------------|------------|----------------|--|
| | | | | F | Residential | No | on-residential | |
| 2 SC retail allocation factor - system peak demand | Exhibit 13,Col D, Lines 6 a | - | | 10.184830% | | 13.554380% | | |
| | | | | | | | | |
| 3 SC retail share IS/SG program costs | Line 1 * Line 2 | | | \$ | 988,615 | \$ | 1,315,689 | |
| | | | | | | | | |

| PROGRAM | <u>201</u> | LO Credits Paid |
|---|------------|-----------------|
| 4 INTERRUPTIBLE SERVICE CREDITS | \$ | 6,025,548.50 |
| 5 STANDBY GENERATOR PAYMENTS | \$ | 2,263,650.32 |
| 6 WHOLESALE A/C LOAD CONTROL CREDITS | \$ | 614,944.00 |
| 7 WHOLESALE INTERRUPTIBLE SERVICE CREDITS | \$ | 802,598.86 |
| 8 TOTAL CREDITS | \$ | 9,706,741.68 |

Notes: 2010 actual credits paid used as estimate of 2012 amounts.

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

| In re: |) |
|---|------------------------------|
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| Application of Duke Energy Carolinas, LLC |) LLC'S REQUEST FOR APPROVAL |
| For Approval of Rider 3 |) OF RIDER 3 |
| |) |

Exhibit 13

Vintage 3 – Allocation Factors

Duke Energy Carolinas DSM/EE Cost Recovery Rider 3 Allocation Factors

| SAW Sales Allocator | | MWH | SC Retail % | | |
|---|-----------------------|------------|-----------------|-----------------|--------------------------|
| 1 NC RetailMWH Sales Allocation | 2010 COS Study | 57,382,346 | | | |
| 2 SC Retail MWH Sales Allocation | 2010 COS Study | 21,476,495 | 27.21216% | | |
| 3 Greenwood Retail MWH Sales Allocation | 2010 COS Study | 63,588 | | | |
| 4 Total Retail | Sum Lines 1 through 3 | 78,922,429 | | | |
| | | А | В | с | D |
| | | | SC Retail Res / | | SC Potail Pag / NonPag |
| | | MW | NonRes % for | SC Retail % (2) | % for Existing DSM (2) |
| Demand Allocators | | | SAW (1) | | % IOF EXISTING DSIVE (S) |
| 5 NC Peak Demand | 2010 COS Study | 11,932,643 | | | |
| 6 SC Residential Peak Demand | 2010 COS Study | 1,719,773 | 10.77890% | | 10.18483% |
| 7 SC Non-Residential Peak Demand | 2010 COS Study | 2,288,743 | 14.34499% | 25.12389% | 13.55438% |
| 8 Greenwood Peak Demand | 2010 COS Study | 13,841 | | | |
| 9 Total Retail Peak Demand | Sum Lines 5 through 8 | 15,955,000 | | | |
| 10 Wholesale Peak Demannd | 2010 COS Study | 930,640 | | | |
| 11 Total System Peak Demand | Line 9 + Line 10 | 16,885,640 | | | |

(1) Col. A, Line 7 or 8 / Line 9
(2) Col B Line 6 + Line 7
(3) Col A Line 7 or 8 / Line 11

V3 Exhibit 13

BEFORE

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|---|------------------------------|
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| For Approval of Rider 3 |) OF RIDER 3 |
| | |

Exhibit 14

Vintage 3 – Forecasted kWh Sales

| SACE 1st Response to Staff |
|----------------------------|
| 011256 |

V3

Exhibit 14

Duke Energy Carolinas DSM/EE Cost Recovery Rider 3 Forecasted kWh Sales for Rate Period

| | Total 2012 | Jan_12 | Feb_12 | Mar_12 | Apr_12 | May_12 | Jun_12 | Jul_12 | Aug_12 | Sep_12 | Oct_12 | Nov_12 | Dec_12 |
|---------------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Fall 2010 Sales Forecast - kWhs | | | | | | | | | | | | | |
| South Carolina Retail: | | | | | | | | | | | | | |
| 1 Residential | 6,648,984,059 | 698,153,386 | 625,553,570 | 521,089,853 | 439,681,932 | 419,404,729 | 535,238,823 | 647,394,210 | 680,354,494 | 625,031,806 | 435,193,207 | 424,117,677 | 597,770,373 |
| 2 General | 5,929,276,816 | 477,414,091 | 462,475,453 | 435,926,435 | 449,673,137 | 462,620,570 | 529,608,857 | 561,663,599 | 577,743,776 | 574,804,546 | 488,575,032 | 447,456,480 | 461,314,838 |
| 3 Industrial | 7,573,258,886 | 584,533,085 | 632,580,859 | 567,701,002 | 634,996,695 | 631,689,309 | 662,193,705 | 641,612,861 | 687,498,896 | 678,809,328 | 620,860,227 | 646,652,644 | 584,130,275 |
| 4 Textile | 1,114,936,694 | 85,596,007 | 97,684,173 | 85,840,144 | 97,083,400 | 98,928,936 | 99,433,115 | 88,637,106 | 105,485,112 | 98,975,267 | 88,664,753 | 90,379,978 | 78,228,702 |
| 5 Other | 44,556,913 | 3,738,639 | 3,688,697 | 3,684,305 | 3,694,165 | 3,690,877 | 3,740,394 | 3,672,293 | 3,777,079 | 3,721,110 | 3,541,657 | 3,871,445 | 3,736,253 |
| 6 Total Non-Residential | 14,662,029,308 | 1,151,281,822 | 1,196,429,181 | 1,093,151,885 | 1,185,447,398 | 1,196,929,693 | 1,294,976,071 | 1,295,585,860 | 1,374,504,863 | 1,356,310,251 | 1,201,641,669 | 1,188,360,547 | 1,127,410,068 |
| 7 Total Retail | 21,311,013,368 | 1,849,435,208 | 1,821,982,751 | 1,614,241,738 | 1,625,129,330 | 1,616,334,421 | 1,830,214,894 | 1,942,980,070 | 2,054,859,356 | 1,981,342,058 | 1,636,834,877 | 1,612,478,224 | 1,725,180,440 |

Adjusted SC Retail Sales Forecast (excludes Greenwood sales)

 8 Residential
 6,648,984,059

 9 Factor to exclude Greenwood
 99.26766
 Line 27

 10 Residential sales excl GW
 6,600,286,497

| 11 Non-Residential | 14,662,029,308 |
|----------------------------------|------------------|
| 12 Factor to exclude Greenwood | 99.9244% Line 30 |
| 13 Non-Residential sales excl GW | 14,650,937,965 |

Opt Out Sales

| | | 2010 kWh Usage | | | |
|----|-------------------|----------------|--|--|--|
| | Vintage 1 Opt Out | | | | |
| 14 | DSM YR1 | 5,891,923,382 | | | |
| 15 | EE YR1 | 4,905,041,586 | | | |
| | Vintage 2 Opt Out | | | | |
| 16 | DSM YR2 | 5,918,617,543 | | | |
| 17 | EE YR2 | 5,305,637,349 | | | |
| | | | | | |

18 Vintage 3 Opt Out Use V2 as estimate

Non-Residental Forecast Sales Less Opt Out

| | V1 EE Rate Components | V1 DSM Rate Components | V2 and V3 EE Rate Components ⁽¹⁾ | V3 DSM Rate Components ⁽¹⁾ |
|---|--------------------------|---------------------------|---|--|
| 19 Total Non-Residential | 14,650,937,965 | 14,650,937,965 | 14,650,937,965 | 14,650,937,965 |
| 20 Less V1 EE Opt Out | 4,905,041,586 | | | |
| 21 Less V1 DSM Opt Out | | 5,891,923,382 | | |
| 22 Less V2 EE Opt Out | | | 5,305,637,349 | |
| 23 Less V2 DSM Opt Out | | | | 5,918,617,543 |
| 24 Sales for Rider Calculation | 9,745,896,379 | 8,759,014,583 | 9,345,300,616 | 8,732,320,422 |
| ⁽¹⁾ Vintage 3 amounts use Vintage 2 opt out assumptions as an estimate of Vintage 3 opt out. | | | | |

| FACTOR TO EXCLUDE GREENWOOD SALES FROM FORECAST: | | | | | |
|---|------------------------------------|------------------|-------------------|--|--|
| | 2010 MWH | Percent to Total | | | |
| 25 Total SC Residential sales | 7,201,060 | | | | |
| 26 Greenwood residential sales | 52,741 | | | | |
| 27 SC Residential excl GW | 7,148,319 | 99.2676% | Line 27/ Line 25 | | |
| 28 Total SC Non-Residential sales 29 Greenwood non-residential sal | 14,339,023 10,847 | | | | |
| 30 SC Non-Residential excl GW | 14,328,176 | 99.9244% | Line 30 / Line 28 | | |
| 31 Total SC Retail Sales 32 Greenwood sales 33 Total SC Sales excl GW | 21,540,083 63,588 21,476,495 | | | | |

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

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| |) |

Exhibit C

Duke Energy Carolinas EE and DSM Vintage 1 Program Overview

PUBLIC VERSION

DUKE ENERGY CAROLINAS

EE AND DSM VINTAGE 1 PROGRAM OVERVIEW

PUBLIC VERSION

Executive Summary

A. Description

During the first quarter 2011 Carolinas Collaborative meeting, Duke Energy is providing an update on the performance of its energy efficiency and demand side management programs for Vintage 1. Our product managers have prepared reports on each of our pilot/programs describing the offerings and details on pilot/program performance. This executive summary describes how Duke Energy Carolinas has done to date in aggregate. Pilot/program specific details will be located in the individual reports.

| Phot/program reports include. | | |
|---------------------------------------|----------|-----------------|
| Program | Category | Customer Group |
| Non-Residential Smart \$aver | EE | Non-residential |
| Prescriptive | | |
| Non-Residential Smart \$aver | EE | Non-residential |
| Custom | | |
| PowerShare | DSM | Non-residential |
| Residential Energy Assessments | EE | Residential |
| Residential Smart \$aver | EE | Residential |
| Low Income Energy Efficiency and | EE | Residential |
| Weatherization Assistance Program | | |
| Energy Efficiency Education | EE | Residential |
| Programs for Schools | | |
| Power Manager | DSM | Residential |
| Home Energy Comparison Report | EE | Residential |

Pilot/program reports include:

Audience

All retail Duke Energy Carolinas customers who have not opted out.

B &C. Impacts, Participants and Expenses

The tables below include 2010 results for Vintage 1. These tables represent information thru December 2010. The reason we have included nominal avoided cost rather than present value of the avoided costs is because our targets for save-a-watt purposes are based in nominal dollars. Please note that because North Carolina and South Carolina have slightly different avoided costs rates, the targets for each are different.

In our reports, we have also not included the number of participants from the filing as well as the percentage of target for participants. The reason for this is because participants from individual measures can represent, for example, 1 CFL bulb in one measure or 1 six pack in another. Due to the multiple measures in programs, this can skew participation targets. To minimize confusion, this information was excluded from the report. Actual participants are included.

The information provided is for the Carolinas is for calendar year 2010. The South Carolina specific information, especially the listed performance against regulatory targets, is for 11 months. Vintage 1 in South Carolina is from February 2010 to December 2010.

Executive Summary

SC System Summary¹²

| \$ in Millions | Vintage 1 Filed | Vintage 1 Actual | % of Target |
|-------------------------|-----------------|------------------|-------------|
| SC Nominal Avoided Cost | \$110.4 | \$201.5 | 183% |
| Program Cost | \$46.2 | \$55.9* | 121% |
| SC kW Impact | 485,551 | 545,015 | 112% |
| kWh Impact | 234,131,697 | 559,012,087 | 239% |
| Units | | 8,379,754 | |

* Program costs as-filed do not include M&V. See below regarding treatment of overheads for all programs.

Through December 2010, the Company is ahead of its avoided cost target for Vintage 1. This is primarily due to high impacts in the energy efficiency program (Residential Smart \$aver). The program cost for Vintage 1 is higher than projected, which has been significantly driven by the increased participation in the Residential Smart \$aver program.

Energy Efficiency

| \$ in Millions | Vintage 1 Filed | Vintage 1 Actual | % of Target |
|-------------------------|-----------------|------------------|-------------|
| SC Nominal Avoided Cost | \$76.5 | \$131.3 | 172% |
| Program Cost | \$24.4 | \$39.0* | 160% |
| kW Impact | 37,319 | 62,386 | 167% |
| kWh Impact | 234,131,697 | 559,042,087 | 239% |
| Units | | 8,140,882 | |

*Includes approximately \$4.5M in overheads and non-residential energy assessments. As filed program costs do not include M&V.

Energy efficiency impacts have primarily been driven by lighting measures in both the residential and non-residential space. As a percentage of the target, the residential portfolio has exceeded expectations to date. This is a result of a higher take rate for CFLs offerings than originally projected.

Demand Side Management – SC System

| \$ in Millions | Vintage 1 Filed | Vintage 1 Actual | % of Target |
|-------------------------|-----------------|------------------|-------------|
| SC Nominal Avoided Cost | \$33.9 | \$37.7 | 111% |
| SC Program Cost | \$21.8 | \$16.9* | 78% |
| SC kW Impact | 448,232 | 482,629 | 108% |
| Units | | 238,872 | |

*Includes approximately \$1.2M in overheads.

The DSM portfolio is divided between the PowerShare (non-residential) and Power Manager (residential) programs. The Company exceeded targets for avoided cost kW.

¹ Numbers included in all tables are rounded. Vintage 1 covers the period from February 2010 to December 2010.

² Program costs listed by program do not include approximately \$5.7 million for overheads and non-residential energy assessments.

Executive Summary

Note: Unlike the EE portfolio, where the kWh target is the same, the DSM portfolio has different kW targets for North Carolina and South Carolina. While the North Carolina EE docket was never closed, the original South Carolina EE docket was closed, included in the South Carolina rate case, and was adjusted up after the North Carolina filing. Both states have limitations on how much DSM can count towards the 4 year avoided cost, with South Carolina having a higher percentage due to the higher kW target.

D. Qualitative Analysis

Highlights

Energy Efficiency

To date, customer participation has been driven primarily by lighting programs and assessments. These measures provide customers with a relatively low cost efficiency upgrade, with minimal hassle, creating a positive initial energy efficiency experience. The Residential Smart \$aver program has seen greater than expected participation. This increase has been primarily driven by the overwhelming participation in the residential CFL offering. The increased participation is attributed to expanding the channels for customers to request CFLs. The new channels are lower cost and provide an improved customer experience.

A second area to highlight is the development of our trade ally network. This network has enabled the Company to minimize acquisition costs by using trade allies as an extended sales force. Providing the trade ally network information on our incentive structure has enabled them to market the incentives to customers.

Demand Side Management

DSM programs significantly exceeded targets for Vintage 1. The overall program cost for demand side programs was higher than what was targeted. The higher than expected program cost is directly related to level of participation of PowerShare in both NC and SC.

Issues

There have been a number of issues that have negatively impacted Company specific energy efficiency programs. These programs include Low Income Energy Efficiency and Weatherization Assistance Program and Energy Efficiency Education Programs for Schools. The issues are addressed in the individual program reports.

Potential Changes

Several programs are reviewing their current processes, and are considering potential changes to Increase customer adoption. Potential changes are discussed in individual program reports.

E. Marketing Strategy

Located in individual program reports.

F. Measurement and Verification

Located in individual program reports.

G. Technical Assumptions

Located in individual program reports.

A. Description

The Smart \$aver[™] Non-Residential Prescriptive Incentive Program provides incentives to commercial and industrial consumers to install high efficiency equipment in applications involving new construction, retrofit, and to replace failed equipment. Incentives are provided based on Duke Energy Carolina's cost effectiveness modeling to assure cost effectiveness over the life of the measure.

Commercial and industrial consumers can have significant energy consumption, but may lack knowledge and understanding of the benefits of high efficiency alternatives. Duke Energy Carolina's program provides financial incentives to help reduce the cost differential between the standard and high efficiency equipment, offer a quicker return on investment, save money on their utility bill that can be reinvested in their business, and foster a cleaner environment. It also provides market demand where the dealers and distributors, or market providers, will stock and provide these high efficient alternatives as they see increased demand for the products. Higher demand can result in lower prices.

The program promotes prescriptive incentives for the following technologies – lighting, HVAC, motors, pumps, variable frequency drives, food services and process equipment. Equipment and incentives are predefined based on current market assumptions and Duke Energy's engineering analysis. The eligible measures, incentives, and requirements for both equipment and customer eligibility are listed in the applications posted on Duke Energy's Business and Large Business websites for each technology type.

Duke Energy contracts with Wisconsin Energy Conservation Corporation (WECC) to handle the fulfillment responsibilities of the program and to provide training and technical support to our Trade Ally (TA) network. CustomerLink provides call center services to customers who call the program's toll free number which is specific to the Smart \$aver Prescriptive Program.

Audience

All Duke Energy North Carolina and South Carolina non-residential electric customers except those that chose to opt out of the program.

| \$ in Millions | Vintage 1 Filed | Vintage 1 Actual | % of Target |
|-----------------|-----------------|------------------|-------------|
| SC Nominal AC | \$18.5 | \$32.5 | 176% |
| Program Cost ** | \$4.4 | \$4.4 | 100% |
| kW | 7,955 | 12,494 | 157% |
| kWh | 31,745,599 | 48,829,183 | 154% |
| Units | | 294,848 | |

B & C. Impacts, Participants and Expenses*

*Numbers are rounded

** Program costs as-filed do not include M&V. Actual results exclude overheads

*** Data in table represents program performance from February 2010 – December 2010.

Consistent with other state programs, lighting measureT8 and T5 High Bays, CFL bulbs, and occupancy sensors have provided the vast majority of impacts and participation to date. Lighting installations have a shorter payback period than most other technologies, making it easier for customers to participate. Motors, pumps, and variable frequency drives as well as HVAC units were also large drivers of impacts.

Duke Energy attributes the higher than expected participation to a number of reasons:

- More pent up demand than expected business customers are looking for ways to save money.
- Corporate goals tied to energy efficiency Large Business and National Account customers continue to be a driving force in the higher than expected participation.
- Trade ally outreach program (provided by WECC) providing training and support to our trade allies who are typically the first point of contact for customers considering these types of projects.
- Duke Energy's internal customer segment teams providing training and support to customers

To date, the company has been able to leverage support costs and its trade ally network across its regions to minimize marketing and administrative costs. However, the potential exists that acquisition costs may rise as the program continues to mature.

D. Qualitative Analysis

Highlights

Getting the trade allies to buy into the program has proven to be the most effective way to promote the program to our business customers. At program rollout, Duke Energy and the WECC trade ally team took an aggressive approach to contacting trade allies associated with the technologies in and around Duke Energy's service territory. To date approximately 450 trade allies across both states, representing the different technologies are signed up as participating trade allies. Their company name and contact information appears on the trade ally search tool located on the Smart \$aver™ website. This tool was designed to help customers who do not work with a local trade ally, find someone in their location who can serve their needs. WECC manages the trade ally database where contact information and participation is reported.

Duke Energy continues to look for ways to engage the trade allies in promotion of the program, including the utilization of focus groups. Suggestions were obtained from two focus groups of top trade ally Lighting and HVAC performers in North Carolina and South Carolina, held in November 2009, and have resulted in the development of an email application submission option. Other suggestions included limited time bonus incentives and a trade ally bonus program.

Duke Energy continues to develop case studies and testimonials from customers who have participated in the program. These are used to help promote the program; showing actual savings and benefits for each technology type.

Issues

Although participation in lighting continues to be better than expected, there are other measures that provide greater savings to customers that have had little or no participation. Examples of these are Heat Pump Water Heaters, some Food Services equipment and Compressed Air nozzles. In some cases, this is

due to the cost of these measures. However, until demand increases, market costs are not likely to go down. Duke Energy continues to work with experienced engineering consultants as well as WECC. Both are familiar with the challenges of moving the market and developing a strategy to increase the participation of these measures going forward. These include the development of targeted marketing campaigns to increase participation in high impact measures; notably variable frequency drives.

Another challenge is the continued weakness of the economy which has resulted in lower than estimated participation in certain measures. Many businesses have capital projects that have been approved but are sitting on the shelf until the economy becomes more stable.

Potential Changes

Standards continue to change and new, more efficient technologies continue to emerge in the market. The Company expects to continue adding new measures to approved programs that provide incentives for a broader suite of products for customers to take advantage of.

E. Marketing Strategy

- Primary delivery of the program is through the existing market channels, equipment providers, and contractors. WECC's trade ally Team provides training and technical assistance to stimulate additional participation and to address identified market barriers.
- Duke Energy's Large Business Customers receive e-mails and informational materials from their Account Managers since program rollout and continuously throughout the year. The Account Managers work closely with their customers from project planning stage through application submittal.
- Duke Energy's Small Business customers receive newsletters and emails announcing program updates.
- Duke Energy Segment Managers focus on specific markets within their customer class and target them with special promotions (webinars, collateral) and support to improve penetration of the technologies where there is the best potential, the biggest customer need, or the best opportunity for long-term market effects.
- Duke Energy's Business Service Center and CustomerLink promote the program when answering calls from business customers.
- Duke Energy's North Carolina and South Carolina business and large business websites are a great source of program information. Customers can go to the websites and learn about the program and its benefits, search for participating vendors, ask questions on-line and fill out and print all the applications.
- In conjunction with WECC, Duke Energy participates in various trade shows, conferences, and energy forums to educate customers and vendors on the benefits of the program, portfolio offerings, and program requirements.

- Duke Energy develops case studies and customer testimonials to profile actual savings and benefits for each technology type. These are used in a variety of marketing channels.
- Duke Energy's marketing efforts for the Smart \$aver ™ Prescriptive Program is often done in conjunction with the Custom Program.

F. Measurement and Verification

Evaluation Measurement & Verification Schedule

| Estimated 2011 | Estimated 2011 | Estimated 2012 | Estimated 2012 | Estimated 2013 | Estimated 2013 |
|-------------------|------------------|-------------------|------------------|-------------------|------------------|
| Process Reporting | Impact Reporting | Process Reporting | Impact Reporting | Process Reporting | Impact Reporting |
| Q2 | Q4 | Q2 | Q2 | Q3 | Q4 |

Marketing Materials

North Carolina Website

http://www.duke-energy.com/north-carolina-business.asp

South Carolina Website

http://www.duke-energy.com/south-carolina-business.asp

Non-Residential Smart \$aver® Program: Smart Saver Custom

A. Description

Duke Energy's Smart \$aver Non-Residential Custom Incentive Program offers financial assistance to qualifying commercial, industrial and institutional customers (that have not opted out) to enhance their ability to adopt and install cost-effective electrical energy efficiency projects.

The Smart \$aver Custom Incentive program is designed to meet the needs of Duke Energy customers with electrical energy saving projects involving more complicated or alternative technologies, or those measures not covered by standard Smart \$aver Prescriptive Incentives. The intent of the Smart \$aver Program is to encourage the implementation of energy efficiency projects that would not otherwise be completed without Duke Energy's technical or financial assistance.

The Custom Incentive application is for projects that are not addressed by the applications for Smart \$aver Prescriptive Incentives. Unlike the Prescriptive Incentives, Custom Incentives do require preapproval prior to the project implementation. Proposed energy efficiency measures may be eligible for Custom Incentives, if they clearly reduce electrical consumption and/or demand.

Currently there are the following application forms that are located on the Duke Energy website under the Smart \$aver Incentives (Business and Large Business tabs):

• **Optional Pre-screen Form:** allows customers and their vendors to submit preliminary project information and receive feedback on potential eligibility and tips on filling out the application form.

o Smart Saver Custom Incentive Pre-screen Form (doc, 102 KB)

• **Generic Custom Application**: Customers or their vendors submit this form with supporting documentation for any type of energy efficiency project. This form is designed for multiple projects and multiple locations.

- o Custom Incentive Application (doc, 374 KB)
- o Custom Incentive Application (pdf, 83 KB)

• **Custom Lighting Application** (Optional- 2 parts). For lighting projects, customers and their vendors can use the generic custom application form or use the 2-part lighting application that includes an excel worksheet with step-by-step instructions.

- o Custom Lighting Incentive Application Part I (doc, 196 KB)
- o Custom Lighting Incentive Application Part II (xls, 89 KB)

Audience

All Duke Energy North Carolina and South Carolina non-residential electric customers except those that chose to opt out of the program.

Non-Residential Smart \$aver® Program: Smart Saver Custom

B & C. Impacts, Participants and Expenses*

| \$ in millions | Vintage 1 Filed | Vintage 1 Actual | % of Target |
|-------------------------|-----------------|------------------|-------------|
| SC Nominal Avoided Cost | \$7.9 | \$9.0 | 114% |
| Program Cost** | \$4.7 | \$1.6 | 34% |
| Energy Impact (kW) | 1,923 | 2,596 | 135% |
| Energy Impact (kWh) | 12,096,000 | 20,892,129 | 173% |
| Units | | 4,113 | |

* Numbers rounded

** Program costs as-filed exclude M&V. Actual results exclude overheads

*** Data in table represents program performance from February 2010 – December 2010.

During 2010, custom incentives were paid on a wide variety of projects such as (in order of total incentives paid): energy management/building controls systems \$395,921, lighting \$248,264, HVAC system upgrades \$109,500, motors \$92,224, variable speed drives \$54,270, compressed air \$30,000, thermal envelope \$8,000 and an additional \$131,000 on projects that are outside these classifications.

D. Qualitative Analysis

Highlights

Participation was strong in 2010, and is expected to grow significantly in 2011 and beyond. The number of new applications and inquiries has seen steady growth.

The efforts to educate the vendors who sell energy efficient equipment (trade allies) have been very successful. In many cases, the vendor will submit the paperwork for the Duke Energy customer, which eliminates a barrier for customers that do not have the resources to devote to the application.

Issues

The custom incentive application process is considered burdensome by some customers due to the technical review that is performed on all projects that apply for a custom incentive. The technical review often requires customers (or their vendor) to quantify the projected energy savings from the proposed project. This can be a lengthy process that can require some level of engineering expertise. This requirement will continue, thus ensuring that incentives will be paid for cost-effective verifiable efficiency gains. Those technologies that seem to be a good fit for the Smart \$aver prescriptive program will be recommended as additions to the prescriptive application(s). The more that is offered through the prescriptive applications, the fewer the burdens that prevent customers from participating in the Smart \$aver program.

Potential Changes

Duke Energy is testing a new marketing concept that attempts to combine Assessments with Smart \$aver custom incentives to encourage Commercial customers to identify and implement Energy Conservation Measures (ECMs) within their facilities. This concept is named Smart Building Advantage (SBA). SBA encourages customers to conduct detailed assessments of their facilities in order to identify financially viable modifications that will improve efficiency and reduce their electric costs. SBA is designed to develop investment grade efficiency recommendations for customers and provide assistance in applying for Smart \$aver incentives. Customers are more likely to invest in energy efficiency modifications if they can receive assistance in identifying changes that result in clear

Non-Residential Smart \$aver® Program: Smart Saver Custom

operational and financial benefits. SBA helps the customer through the process to ensure they have solid recommendations from which they can make sound financial decisions around energy efficiency changes.

E. Marketing Strategy

The marketing strategy for custom incentives is tied to the Smart \$aver prescriptive incentives. See the report on prescriptive incentives for a description. The strategy is to promote prescriptive incentives, which show pre-approved incentive amounts that get customers interested in a project and are designed for a high volume of applications. Then, if a customer's project does not fall under prescriptive incentives, the custom application is there to offer as an alternative.

F. Measurement and Verification

Evaluation Measurement & Verification Schedule

| Estimated 2011 | Estimated 2011 | Estimated 2012 | Estimated 2012 | Estimated 2013 | Estimated 2013 |
|-------------------|------------------|-------------------|------------------|-------------------|------------------|
| Process Reporting | Impact Reporting | Process Reporting | Impact Reporting | Process Reporting | Impact Reporting |
| Q2 | Q4 | Q2 | Q2 | Q3 | Q4 |

PowerShare®

A. Description

PowerShare[®] is Duke Energy's demand side management (or demand response) program offered to Commercial and Industrial customers. Currently made up of Mandatory (PS-M), Generator (PS-G), Voluntary (PS-V), and CallOption (in SC) options, customers can choose from a variety of offers. Under PS-M and PS-G, customers receive capacity credits for their willingness to shed load during times of peak system usage. These credits are received whether an event is called or not. Energy credits are also available for participation (shedding load) during curtailment events. The notice to curtail under these offers is often rather short (15-30 minutes) and there are penalties for non-compliance during an event.

Audience

PowerShare[®] is offered to non-residential customers who are able to meet the load shedding requirements.

| \$ in Millions | Vintage 1 Filed | Vintage 1 Actual | % of Target |
|-------------------------|-----------------|------------------|-------------|
| SC Nominal Avoided Cost | \$11.1 | \$19.6 | 177% |
| SC Program Costs** | \$7.3 | \$7.1 | 97% |
| SC kW Impact | 142,679 | 250,747 | 176% |
| Units | | 103 | |

B & C. Impacts, Participants and Expenses*

* Numbers are rounded

**Program costs as filed did not include M&V. Actual program costs do not include overheads.

*** Data in table represents program performance from February 2010 – December 2010.

Variance

PowerShare[®] participation (as measure in impacts) is above target (on a system basis)—as did avoided costs and program costs during 2010. With the Commission ruling that split the DSM and EE portions of the North Carolina rider (and aligned the rider structure with South Carolina), some customers did opt-in to PowerShare[®] offerings at the end of the year. A portion of this impact was seen in the last months of 2010 and there is more that will be first counted as a resource in 2011.

Note: Unlike the EE portfolio, where the kWh target is the same, the DSM portfolio has different kW targets for North Carolina and South Carolina. This is because while the North Carolina EE docket was never closed, the original SC EE docket was closed, was included in the South Carolina rate case, and was adjusted up after the North Carolina filing. Both states have limitations on how much DSM can count towards the 4 year avoided cost, with South Carolina having a higher percentage due to the higher kW target.

D. Qualitative Analysis

Program Highlights

PS-Mandatory and PS-Generator have been well received by customers in both states. Most IS and SG customers in South Carolina moved over to PS-M and PS-G, respectively. The former SG customers that did not switch were mostly small generators and don't qualify for PS-G because of the minimum curtailable load requirement. CallOption might be an option for these customers with its reduced minimum requirement, and we hope to see more of these customers sign-up during 2011.

PowerShare®

Program Issues

Based on customer feedback received during focus group sessions, customers indicated they wanted more options, greater flexibility and longer lead time (notice) of events. For example, some customers could not respond in the 15 or 30 minute afforded under the existing programs. Duke Energy took that feedback and used it to shape the parameters of CallOption. This new offer provides for a minimum of six hours advanced notice and allows the customer to pick a level of commitment to curtailing load. For a willingness to participate in more events, Duke Energy is able to pay the customer more in capacity credits.

Potential Changes

As a way of building on to the existing options, Duke Energy proposed CallOption as a new offer under the PowerShare[®] umbrella. With CallOption, customers receive a longer notification window and can qualify to participate at lower curtailable loads. This means customers who would otherwise not be able to participate in PowerShare[®] can earn capacity credits for their willingness to shed load during times of peak usage and receive energy credits when they respond to curtailment events. Furthermore, for economic events, customers have the option of buying through the event without paying penalties or being subject to expulsion from the program. Customers get to choose their level of participation by selecting the number of potential events for which they want to sign up. This gives them the flexibility to increase their capacity credits. Also, more flexibility is included in how the curtailable load is calculated, either a firm demand is set by the customer (similar to PS-M, PS-G or PS-V) or they establish a fixed demand reduction and shed a specific amount of energy below their projected usage on an hourly basis. While CallOption has been approved in SC, it is still pending a Commission ruling in NC.

E. Marketing Strategy

Marketing efforts for PowerShare[®] have focused on the relationship between the Duke Energy account managers and their assigned customers. As part of their normal contact with customers, the Account Managers have introduced PowerShare[®], including any new options/offers while explaining the value proposition to the customer. These visits are supported with in-house, analytical spreadsheets, showing the specific incentives for each offer as applied to the customer's specific load profile as well as collateral to explain the details of all the PowerShare[®] offers.

In addition to the above marketing efforts, webinars were held to introduce CallOption and to review the details around the PowerShare[®] offers. Multiple sessions were offered with varying levels of participation. Since the primary focus in SC during 2010 was on converting previous IS and SG participants to PowerShare[®], the Company has not spent a significant amount of the time selling new participants on CallOption. We will conduct further training with the Account Managers in 2011 in an effort to create "new" PowerShare[®] customers via CallOption. Due to the marking efforts, we received a high enrollment of customers in a short time.

F. Measurement and Verification

| | Evaluation measurement & vernication schedule | | | | |
|-------------------|---|-------------------|------------------|-------------------|------------------|
| Estimated 2011 | Estimated 2011 | Estimated 2012 | Estimated 2012 | Estimated 2013 | Estimated 2013 |
| Process Reporting | Impact Reporting | Process Reporting | Impact Reporting | Process Reporting | Impact Reporting |
| Q2 | Q3 | Q2 | Q3 | Q2 | Q3 |
| | | | | | |

valuation Measurement & Verification Schedule

G. Technical Assumptions

Impacts vary based on the amount of load customers opt to make available.

A. Description

The Residential Energy Assessments program includes two separate measures: 1) Personalized Energy Report (PER) [®] and 2) Home Energy House Call.

The Personalized Energy Report (PER)® Program is a residential energy efficiency program that provides single-family home customers with a customized report about their home and how their family uses energy, which can be provided in two ways: 1) postal mail 2) online. The overall goal is to help the customer better understand his/her energy usage and to better manage energy costs. In addition, the customer receives CFLs as an incentive to participate in the program.

The PER program have two variations: The first is a mailed offer, and the second is an online offer to Duke Energy customers that have signed into our Online Services (OLS) bill pay and view environment. The mailed PER offer involves more work, but it appeals to certain market segments. Eligible customers are chosen by the Duke Energy market analytics team to maximize the participation by mailing an offer to those customers most likely to respond. This program targets those customers who may not have access to a computer or would not answer an online survey. However, since the online survey participants are much easier to process, both means of completing the survey are offered. Online participants get their PER online in a printable PDF, and customers mailing the energy survey receive their PER in the mail.

The Online Energy Survey is offered two ways.

1) We offer it as part of the mailed PER offer, and 5 percent to 10 percent of the participants choose the online survey instead of the return mail survey.

2) We also offer the online survey to other eligible customers when they visit their account information online.

We track these two types of survey participants separately.

Home Energy House Call (HEHC) is a free in-home assessment designed to help our customers learn about home energy usage and how to save on monthly bills. The program provides personalized information unique to the customer's home and energy practices. An energy specialist visits the customer's home to analyze the total home energy usage and to pinpoint energy saving opportunities. An energy specialist will also explain how to improve the heating and cooling comfort levels, check for air leaks, examine insulation levels, review appliances, help the customer preserve the environment for the future and keep electric costs low. A customized report is prepared, explaining the steps the customer can take to increase efficiency. As a part of the Home Energy House Call program, customers receive an Energy Efficiency Starter Kit. At the request of the customer, the energy specialist can install the efficiency items that allow the customer to begin savings immediately.

The HEHC program is administered by a third party vendor, Wisconsin Energy Conservation Corporation (WECC). WECC provides support services based on Duke Energy forecasts; schedules and completes audits; and reports and uploads results to Duke's participation database. Additional key vendors include ProtoType, which is responsible for mailing customer acquisition brochures, CustomerLink, which is the call center providing customer care support and scheduling and Niagara, which is accountable for creating the Energy Efficiency Starter kits the customer receives at the time of the audit.

<u>Audience</u>

Personalized Energy Report targets residential customers who want customized information regarding their energy use, as well as specific recommendations to reduce their usage and utility bill.

Home Energy House Call targets residential customers that own a single family home with at least four months of billing history and have central air, electric heat or an electric water heater.

B & C. Impacts, Participants and Expenses*

| \$ in millions | Vintage 1 Filed | Vintage 1 Actual | % of Target |
|-------------------------|-----------------|------------------|-------------|
| SC Nominal Avoided Cost | \$6.7 | \$2.8 | 42% |
| Program Costs** | \$2.8 | \$2.4 | 86% |
| Energy Impact (kW) | 3,684 | 1,166 | 32% |
| Energy Impact (kWh) | 24,762,131 | 8,613,288 | 35% |
| Units | | 15,676 | |

* Numbers rounded

**Program costs as filed did not include M&V. Actual program costs do not include overheads.

*** Data in table represents program performance from February 2010 – December 2010.

D. Qualitative Analysis Highlights

Personalized Energy Report: Regarding the mailed PER offer, one of the most important attributes to our success is the ability of our internal market analytics to use market segment information and predict the potential response rates of different residential segments. Often, in this day of electronic correspondence, customers who get an opportunity to respond to a mailed survey instead of an online survey are eager to participate.

The PER campaign began in the fall of 2009 with 175,308 offers mailed to North Carolina and South Carolina customers. Much of the participation was seen in 2009, but the activity continued into 2010 with 23,532 participants. The total campaign customer response rate was approximately 24%.

Carolina's PER Participation from January 2010 to December 2010 *

| State | Total participation |
|-----------------|---------------------|
| North Carolina | 16,983 |
| South Carolina | 6,549 |
| Total Carolinas | 23,532 |

*Data in table represents Carolinas program performance from January 2010 – December 2010.

The Online Survey offer to OLS customers continued in 2010. Participation increased during active promotions, such as the online reminder to complete the survey for a free six pack of CFLs.

Carolina's OLS Survey Participation from January 2010 to December 2010 *

| State | Total participation |
|-----------------|---------------------|
| North Carolina | 3,364 |
| South Carolina | 1,297 |
| Total Carolinas | 4,661 |

*Data in table represents Carolinas program performance from January 2010 – December 2010.

Home Energy House Call: The Home Energy House Call program is offered to residential homeowners. The annual goal was 5000 for the Carolinas; due to increased customer interest, we exceeded our goal with customers sitting on our waiting list until appointments became available.

| State | Total participation |
|-----------------|---------------------|
| North Carolina | 4,690 |
| South Carolina | 1,798 |
| Total Carolinas | 6,488 |

Carolina's HEHC In-Home Assessment Participation January 2010 to December 2010 *

*Data in table represents Carolinas program performance from January 2010 – December 2010.

These participants responded to our direct mailing brochure and registered by phone, mail or online. Once appointments were scheduled, an energy specialist arrived at customers' homes to identify potential energy problems and to provide an Energy Efficiency Starter Kit, as well as additional CFLs.

<u>Issues</u>

- We had several issues with the PER data transfer between Duke and Aclara (former vendor), and the scan process was challenged by the overwhelming response. All the offers went out at the same time, and in the future, we have agreed that the offer being mailed in separate waves would be an improvement. All processing issues have been resolved for future campaigns.
- Increased interest in the HEHC program has created a larger than normal waiting list; over 45 days. HEHC is a new program in the Carolinas, and word of mouth has been successful, as well as a hindrance. Everyone has been trying to take advantage of this program due to the home energy audit, Energy Starter Kit and a detailed report pinpointing potential energy inefficiencies. Additional auditors have been supplied to reduce the backlog, and we have found that most customers are willing to wait because of the idea of having an energy specialist visit their homes. Increased spending has occurred due to increased awareness of the new product in the market place. Knowing there is a delicate balance of supply and demand, we have created a reporting tool to assist with mail drop estimates to avoid customers being placed on our waiting lists.
- In the current market, we are seeing an approximate 2 percent response rate across all five of our service states, which are adequate, but for this type of program, HEHC should have a higher response rate especially during such hard economic times. We are currently working on how to increase the response rates while reducing direct mail drops.

Potential Changes

- Future PER campaigns will emphasize the online survey as being the fastest way to receive the report and the CFLs, but paper reports will still be available.
- With so many customers willing to participate in HEHC, program goals were met in August for the Carolinas. We have decided to extend the goal in the Carolinas to a "do not exceed" amount because of how difficult it is to find such talented auditors that are customer friendly and already have been with the program since January of 2009. Our customers are continuing

to call Customer Link, and the program is in such demand, we do not want to lose momentum in the market place.

- For the HEHC program, specialty bulbs are being considered as additions to the program (DSMore runs are taking place currently). These specialty bulbs include candelabra and recessed lighting bulbs. We have found most homes have lighting fixtures requiring these specialty bulbs, and this is a huge opportunity to consider for HEHC.
- Currently, program enhancements are taking place. CustomerLink scripts are being improved to inform the customer of the EE Starter Kit and installation of CFLs. The customer reminder call prompts customers about their appointments to decrease cancellation rates, as well as to begin looking for places to install efficiency measures. We also are looking into reducing the number of questions our auditors ask during the in-home assessment. By saving time with how many questions a customer has to answer, our auditors are able to focus more on energy savings inside the home while installing more measures. By making these improvements, this will allow Duke Energy to increase impacts from each participant in the program.
- Duke Energy's marketing analytics team has the ability to pull customer information directly from our billing system. Marketing analytics will receive a list of zip locations to target and will pull customer data and send to ProtoType for further scrubbing before brochures are mailed. Some TV and Radio media has been used when requested. The overall strategy for this program is to reach all customers in Duke Energy's service territory, to promote energy efficiency by customers understanding the importance of conservation and to help the environment. By customers reducing their electric bill, Duke Energy is able to reduce its need to build additional power plants and, ultimately, keep its rates as low as possible.

HEHC Program information is available to all customers on the Duke Energy Web site: http://www.duke-energy.com/north-carolina/savings/home-energy-house-call.asp.

E. Marketing Strategy

The overall strategy for the mailed PER campaign is to maximize the response rate of the mailed offer. Since the mailed offer includes a survey that is preprinted with specific customer coding, the initial expense of the mailing needs to be considered for the cost effectiveness of the program. Maximizing the response rate greatly influences the cost effectiveness. Some customers try to participate more than once in the online program, but we do not mail duplicate CFLs within this particular program offer.

Of equal importance to the installation of CFLs is the content of the PER report, which is designed to duplicate what a customer would see in his/her online PER report. The goal here is to help customers review their past energy use, compare their usage to other similar homes, understand where the energy use is going and to read tips on how to conserve.

The marketing strategy for the HEHC program is to pre-qualify customers before sending out direct mail brochures. Pre-qualification of customers will reduce overall customer acquisition costs. Analyzing HEHC's previous customer data, such as response rates and seasonal trends, this analysis will help balance the load of supply and demand while minimizing customer wait time. HEHC registration is also available online to reduce mail costs as well. Maximizing response rates are key for overall program cost effectiveness.

F. Measurement and Verification

Evaluation, Measurement & Verification Schedule

Personalized Energy Report/Online Services Survey

| Estimated | Estimated | Estimated | Estimated | Estimated | Estimated |
|--------------|-------------|--------------|-------------|--------------|-------------|
| 2011 Process | 2011 Impact | 2012 Process | 2012 Impact | 2013 Process | 2013 Impact |
| Reporting | Reporting | Reporting | Reporting | Reporting | Reporting |
| Q2 | Q2 | Q2 | Q4 | Q4 | Q4 |

Home Energy House Call

| Estimated | Estimated | Estimated | Estimated | Estimated | Estimated |
|--------------|-------------|--------------|-------------|--------------|-------------|
| 2011 Process | 2011 Impact | 2012 Process | 2012 Impact | 2013 Process | 2013 Impact |
| Reporting | Reporting | Reporting | Reporting | Reporting | Reporting |
| Q2 | Q2 | Q2 | Q4 | Q4 | Q4 |

Appendix

Duke Energy DUKE ENERGY 139 East Fourth Street Cincinnati, OH 45202

September 17, 2009



Dear

Duke Energy understands your concern about your rising energy costs. That's why we're pleased to offer a free Personalized Energy Report (PER)™. The report details how you use energy and how you can save energy. Plus, for a limited time you will also receive a free six pack of Compact Fluorescent Light Bulbs (CFLs). An ENERGY STAR®-qualified CFL saves about \$30 in energy costs over its lifetime. Replace your home's six most frequently used bulbs with CFLs and watch your savings grow to \$150.

Your Personalized Energy Report will provide you with a better understanding of your energy usage and offer customized ideas to help you save money on your monthly bill. You simply answer a few questions about your home appliances and how you use energy, and the report is personalized for you.

With the Personalized Energy Report you can:

- Understand how your household uses energy
- · View your home's month-to-month energy usage and bill amount trends
- Compare your home's energy usage to similar households in your area
- · Receive energy savings tips for your home
- Learn about programs that may save you money

Get Your FREE Personalized Energy Report and Six Pack of CFLs Now

Just complete the Home Energy Survey. You can complete the survey in one of two ways:

Online. Go to www.duke-energy.com. If you are a current Online Services user, sign in to manage your
account. If you are a new online user, click Register to sign up. Once you sign in, take the brief Energy Survey,
you will see your customized Personalized Energy Report online immediately.

Important: To receive your free six pack of CFLs, you must enter promotion code 1901 at the bottom of the Energy Survey Web page.

While you are at our Web site, check out all the other energy saving information, interactive tools and programs we offer to help you save energy and money.

 Paper. If you prefer, you can complete the enclosed questionnaire and mail it in the postage-paid envelope before September 30, 2009. Your Personalized Energy Report will be mailed to your home within three weeks from the date we receive the completed questionnaire.

You will receive your free six pack of CFLs soon after you receive your Personalized Energy Report. Thank you for your interest in saving energy. We look forward to helping you take control of your monthly energy costs.

Welklin

D. Welklin Personalized Energy Report Manager

www.duke-energy.com

RECEIVE YOUR FREE, PERSONALIZED ENERGY REPORT (PER)*

| | F YO | OR THE ADDRESS SHO DUR HOME AND ENERG | WN ABOVE, PLEASE ANSWER THE FOLLOW Y USAGE. FILL IN THE CIRCLES COMPLETED | ING QUESTIONS RELATED TO Y USING BLUE OR BLACK INK. | |
|----|-----------------------------------|--|--|--|--|
| P | OPERTY DE | TAILS | 7. How would you describe the size of the rooms | 11. How old is your heating system? | |
| - | | | in your home? | 😂 0 – 4 years | |
| 1. | What two of home | bost daterihat unur | C Rove average | 😂 S – 9 years | |
| | primary residence? (mex my me) | | - hurzes | — 10 – 14 years. | |
| | C Detached singl | e family | Below average | — 15 – 19 years | |
| | C Duplex / 2 fam | iy . | | 🗁 20 years or greater | |
| | C Townhouse | S | Approximate size (heated area) of your home? | | |
| | C Apartment / Ma | ulti Family / (3 or more units) | Your answers to questions 6 & 7 above will | COOLING SYSTEM | |
| | Condominium | Contract And Break and the second | allow us to estimate the size of your home in source fact. Or if you know the source feature | oooenta ararem | |
| | C Manufactured | tome | of your home, you may choose it here and we | 12 Design have a stated section method of the | |
| | | | will use your input. | Do you new a central cooling system: un you use window or more air conditioners, you will | |
| | How many levels of | fees your home have | □ < 500 | note this in question 14) | |
| | excluding the base | ment and unfinished attic? | - 508-999 | No central cooling system | |
| | -1 | | 1000-1499 1000-149 1 | Central air conditioning | |
| | 2 | | IS00-1999 | C Heat Pump | |
| | 01 | | 2000-2499 | 200 garages | |
| | | | 2500-2999 | 13. If you have any cooling system, how old is it? | |
| | In which were used | and home how? | 3000-3499 | C 0-4 years | |
| | in what year was y | jour nome pant? | - 3500-3999 | C 5-9 years | |
| | C Before 1959 | | | - 10 - 14 years | |
| | ○ 1960 - 1979 | | Don't know | 15 - 19 wars | |
| | I 1980 – 1989 | | | 20 years or greater | |
| | Image: 1990 - 1997 | | MAIN HEATING SYSTEM | | |
| | C 1998 - 2000 | 6 | C- The Contract of | - 18. Do you use more or window air conditioners? | |
| | 2001 – 2007 | | What is the fuel used in your orimany | C. No. | |
| | | | heating system? | - No | |
| | | | C Betric | | |
| ÷ | Does your home h | ave an attic? | Natural Gas | 15 Line many man or window \$5"x7 | |
| | C Yos | | O 00 | 13. How many room or window wyos: | |
| | C No | | C Propense | | |
| | | | Other (salar, wood, etc) | | |
| | Doos your home h | sup a hasoment? | No heat system | | |
| | - Ver heated | are a paperior. | | 12 Music have a sector best as and ending | |
| | tes, neared | | 10. Which of the following bests describes your | If you have a central resulting and cooling system with sir durts, are any of those durts. | |
| | tes, unheated | 1 | home's primary heating system? | located in the attic? | |
| | C No | | Destric Baseboard or ceiling cable | () hs | |
| | 1140000000000000000 | | Escod air furnace | 🗁 No | |
| | Excluding bathroor | ns and hallways, how many | Standard heat pump | Not applicable | |
| | rooms are in your | BOTTHE : (ID CALLS & THAT SINCE WAS SAMERED) | Ground source heat pump | | |
| | | | Water boiler | | |
| | | | Steam boller | | |
| | E. | | Wood heating system | | |
| | | - 9 Marchard | Heat pump with gas backup | | |
| | - x | MORE STATL 2 | Heat pump with property backup | | |
| | | | Heat pump with of backup | Duke 📄 | |
| | | | No field system | Energy | |

Public Version

Residential Energy Assessments

SACE 1st Response to Staff 011278 Exhibit C

| 17. | What is your thermostat setting for a typical heating day and a typical cooling day in the | 19. How many people live in your home? | 26. a. Do you have a swimming pool? |
|-----|---|---|---|
| | afternoon? | | 165 |
| | Heating | C 2 | ⊂ No |
| | ○ <67* | | b. Do you have a pool heater? |
| | □ 67 – 70 F | - 4 | 😄 Yes |
| | C) 71-73 F | | 🚍 No |
| | ○ 74-77 F | 00 | |
| | ⇒ 77 *F | / or more | wmarrype or rule do you use to nearyour occi? |
| | Thermostat off/ No thermostat | 20 Database and mat this home? | |
| | Cooling | 20. Do you own of tens this norme? | Electric |
| | ○ <69 * | C Own | Natural Gas |
| | ○ 69 - 72 °F | | - Oil |
| | 73-76 5 | | Propane |
| | C 77 - 78 F | What fuel is used by your water heater? | Not applicable |
| | ○) > 78 °F | C Heart | 27. a. Do you have a hot tub? |
| | Thermostat off/ No thermostat | C Nestane | C Yas |
| | | C Other | No |
| | | C None | |
| 18 | Do you have any of the following comfort | | b. What type of fuel do you use to heat your |
| | issues in your home? | 22 What is the age of your water heater? | hot tub? |
| | | - 0-4 years | Electric |
| | a. Cold drafts in the winter | C 5-9 years | Natural Gas |
| | CCC: Yes | — 10 – 14 years | 🗆 0i |
| | 🗢 No | — 15 – 19 years | - Propane |
| | | 🗁 20 years or greater | |
| | Sweaty windows in the writter | | Would a two degree increase in your home's |
| | 🗁 Yes | 23. What type of fuel do you use for clothes | afternoons affect your family's comfort? |
| | | drying? | Not at all |
| | a Oraling system will not have the house | - Bectric | A small impact |
| | comfortable | Sector Sector | A moderate impact |
| | | C Other | A large impact |
| | No. | | |
| | | 24 What have of facil do you use for your each | 29. Are you planning to make any large purchases |
| | d. Hasting system will not keep the home | What type of rule oo you use for your cook too? | to improve the energy efficiency of your home |
| | combitable | Bectric | within the mat three years: |
| | 🖂 Yes | C Natural Gas | - N3 |
| | I No | C Other | - NO |
| | | C Nane | Not sure |
| | e. Uneven temperatures between rooms | | 30. How many CFLs* do you have installed in your home? |
| | C No | 25. What type of fuel do you use for your oven? | |
| | · No | Bectric | |
| | | 🗁 Natural Gas | |
| | | - Other | |
| | | C None | |

31. Please print your email address in the boxes below:

21

PERSONALIZED ENERGY REPORT (PER)^{IM}

November 24, 2009





Dear Customer:

Thank you for joining thousands of households that have taken steps to save energy and money by requesting a **Personalized Energy Report (PER)**TM. This report analyzes your past energy usage and evaluates your answers from the energy survey, to provide:

- · A history and seasonal chart of your energy use
- · A pie chart estimating how much energy is used
- A comparison of your energy use to similar homes
- Tips that help you save energy and money.

A copy of your report is also available online at www.duke-energy.com when you sign in to Online Services. When you sign in to manage your account, be sure to visit the Home Energy Center, where you will find a wide assortment of energy saving tips, tools and helpful charts.

Sincerely,

Welklin

Dan Welklin Personalized Energy Report (PER)[™] Manager

| Prepared for | |
|--------------------|-------------------|
| Account No. | |
| Date Prepared | November 24, 2009 |
| Type of Home | SingleFamily |
| Home Size | 1,750 |
| Year Home Built | 2001 - 2007 |
| Space Heating Fuel | Propane |
| Water Mention Fund | Batticky |

YOUR PERSONALIZED ENERGY REPORT (PER)T#

YOUR MONTHLY ELECTRIC USAGE WITH AN APPROXIMATE ELECTRIC CHARGE*

| Mes with the | 00 | OCTOBER 2008 - SEPTEMBER 2009 | | |
|--|-------------|-------------------------------|-----------------|--|
| NOTION . | BIR Month | Electricity Likage (WWh) | Approximate BIP | |
| The state of the | Oct 08 | 915 | \$78 | |
| and the second | Nov 08 | 982 | \$84 | |
| | Dec 08 | 827 | \$71 | |
| Contraction of the second | Jan 09 | 944 | -\$81 | |
| | Freb 09 | 820 | \$70 | |
| | Mar 09 | 787 | \$67 | |
| | Acr 09 | 848 | \$72 | |
| Contraction of the second seco | May 09 | 1,055 | \$90 | |
| 400 | 20 mit. 109 | 1,397 | \$119 | |
| a dama | Jul 09 | 1,777 | \$152 | |
| | Aug 09 | 1,532 | \$131 | |
| Alles A | 5ep 09 | 1,352 | \$315 | |
| KILOWATTHOUN | Tata | 13,237 | \$1,129 | |

"Important. Average energy noise are used in this report. The fail arresponds in this table and following charts will not match your actual energy chars. For detailed informations on your actual fails, wat "Energy Unage and Cost Details" in your Ordine Services account at www.duke-energy.com.,



A SAMPLE OF YOUR HOMES MONTH-TO-MONTH ELECTRIC USE*

* Note that your energy use can be impacted by seasonal weather .

KNOW YOUR BILL AMOUNT IN ADVANCE.

The Equal Payment Plan is a free service that makes managing your budget essier by providing a predictable monthly bill. Equal Payment Plan covers all basic services. Additional services, such as out door lighting, are not included in the plan.

Your monthly bill is based on your previous year's electricity usage and is divided into 11 equal payments. It makes planning and budgeting your energy costs more accuste and convenient. All you need is an account with a record of good payment for the past 12 months.

To sign up or learn more, visit www.duke-energy.com/south-carolina/billing/equal-payment_asp.


Residential Energy Assessments



The dollar amounts and percentages in this ple chart are estimates based on inputs you provided on your survey. They are not based on actual measured readings from your home.

YOUR HOME'S ANNUAL ELECTRIC USAGE COMPARISON TO SIMILAR HOMES

The scale to the right shows you how your household's annual electric usage compares with the range of usage by similar households serviced by 0 site Energy in South Carolina.

This comparison considers your home's fuel blend, the number of people in your family, and other information you provided in your questionnaire.

Using electricity wisely is good for the environment, saves you money, and may reduce the need to build more power plants in South Carolina. And that's good for everybody.

| MINUL COMPARES | ON OF YOUR ELECTRICAL USA | 2 |
|------------------------|-------------------------------|--|
| Lew thags 7,995 kWh | Midpoint U suge 9,505 k/Wh | High Usage 11,525 sWe |
| | Your | A annual directric unique of 13,237 With |

NO CHECKS, NO STAMPS, NO HASSLES

Automatic Monthly Payment is a free service that automatically pays your energy bill by withdrawing from your bank account on or after your payment date. There are no due dates to remember, checks to write or stamps to buy.

When you entroll, you select a payment date that is 10 to 14 days after your bill date. Enrolling is easy. All you need is a check or deposit slip from your bank and your Duke Energy account number.

To sign up or learn more, visit www.duke-energy.com/south carolina/payment/automatic-monthly.asp,



ENERGY SAVING TIPS FOR YOUR HOME

HEATING

In the winter, if you manually set your thermostat down to save money while you're gone, when you return, reset your thermostat to the normal temperature setting. Setting the thermostat really high won't help it heat up any faster.

When heating your home, try to minimize the number of times that doors to the outside are opened and closed; cold outside air enters your home each time you open the door.

The use of ceiling fars in the winter is most effective in rooms with very high ceilings, where warm air rises and collects above the living space. Normal rooms of 8 to 10 foot ceilings, will see it the benefit from fan usage.

If you've turned down your thermostat in the winter to save money, you may be uncomfortable in the evening hours when you are less active. For these shot periods, consider using a portable heater to warm the room that you occupy instead of turning up the thermostat.

COOLING

In the summer, if you manually set your thermostat up to save money while you're gone, when you return, reset your thermostat to the normal temperature setting. Setting the thermostat really low worth help it cool down any faster.

In the summer, use the exhaust fans in your kitchen and baths to exhaust hot air and moisture. Both the heat and the humidity is an extra load on your air conditioner.

When air conditioning your home, try to minimize the number of times that doors to the outside are opened and closed; hot and humid outside air enters your home each time you open the door.

When air conditioning, avoid activities that add heat and humidity to your home during the hotest parts of the day. This includes cooking, bathing, clothes drying and dishwashing.

WATER HEATING & LAUNDRY

Don't overload the dryer. Overloading makes the dryer work harder and may cause excessive lint and wrinking.

Dry loads consecutively to take advantage of heat build-up in your days.

Remove clothes as soon as they are dry. This not only saves energy but also helps to prevent wrinking.

Your dishes should not need raising before putting them in the dishwasher, but if you do, use cold water instead of hot.

WEATHER IZATION

Heavy curtains on the use of window quilts will help induce; heat loss at night during the heating season. When the sun is shinning open the covering and allow the san to help heat the room.

During the heating season, keep window stades open during the day to benefit from the heat of the sun. Close the window shades at night to keep the heat in.

LIGHTING

The money you spend on light builts is only 5-10 percent of your total lighting costs. The other 90-95 percent is the cost of electricity. Energy efficient compact fluorescent lights cost more to purchase, but only use about one fourth the energy to supply the same am ount of light.

Take advantage of daylight whenever possible and turn off unneeded lighting. Fotules with photocells and motion detectors are an excellent way to save on your lighting costs.

Use dimmens to control the amount of light you need. Dimming the lights to half the illumination cuts energy corea mption roughly in half. (Note: For compact fluorescent lights, use only builts that are rated for use with dimmers.)

Look for the ENERGY STAR label on light builts and light fixtures. These models save energy, and money, and help the environment.

MISCIEL LANEO US

If you are thinking about purchasing a new TV or VOR, look for ENERGY STAR models. These energy efficient models save money and help protect the environment by using less energy.

Comp uters and monitors qualify for an ENERGY STAR rating if they have a low energy "skeep" mode when not in use. If your computer has this feature make sure that it is enabled. Of course, you can save even more energy by turning these items off.

Screen savers, while effective in preserving the monitor, actually don't save energy. The best way to preserve the monitor and save energy is to turn it off.

Residential Energy Assessments

HEHC Brochure

SAVE SOME GREEN WITH A HOME ENERGY HOUSE CALL







REDUCE YOUR ENERGY BILL

Home Energy House Call is a free in-home energy assessment designed to help you learn how your home uses energy and how you can save on your monthly bills. The program provides personalized information unique to your home and energy practices.

An energy specialist will visit your home to

- Pinpoint potential energy problems in your home at no cost to you
- Explain how to improve the heating and cooling comfort level of your home
- Help you preserve the environment for the future and keep electric costs low
- Provide you with a free Energy Efficiency Starter Kit

From the energy specialist's observations, a customized report is prepared detailing steps you can take to increase efficiency and reduce your energy bill.

RECEIVE FREE ENERGY SAVING ITEMS

As a part of your Home Energy House Call, you will receive a free Energy Efficiency Starter Kit. At your request, the energy specialist can install the efficiency items so that you can begin saving right away.

TO QUALIFY, YOU MUST

- Be a Duke Energy residential customer in North or South Carolina
- Have one of the following: electric heat, electric water heater or central air
- Own a single-family home and have lived there for at least four months (rental properties and mobile homes do not qualify)

START SAVING TODAY!

To sign up for your free Home Energy House Call, use one of the following methods

- Visit us online at www.duke-energy.com
- Call 1-877-388-7676 (toll free)
- Complete and return the postage-paid reply card

*Items in actual kit may differ slightly from those shown in photo.

MAKE A DIFFERENCE

WORKING TOGETHER FOR A BETTER TOMORROW By the year 2030, demand for electricity in the United States is expected to grow by approximately 25 percent, according to U.S. Department of Energy forecasts. In addition to developing nuclear and advanced cleaner-coal power plants, Duke Energy is leading the way by pursuing clean, renewable energy sources and helping you save energy through innovative efficiency programs. By carefully balancing all of these sources, we can meet our goal of providing you with reliable and affordable energy.

With energy efficiency programs such as Home Energy House Call, Duke Energy is helping you lower your energy consumption, and your energy savings helps us to meet the growing need for electricity. By participating in Home Energy House Call, you help preserve the environment, conserve energy and lower your bill.

Working together, we can reduce your energy consumption and contribute to a better tomorrow for all!





TTN HOME ENERGY HOUS

ATTN HOME ENERGY HOUSE CALL DUKE ENERGY 1 E 1ST ST E 300 DULUTH MN 55802-9951

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Residential Energy Assessments

SIGN UP TODAY

EXPERIENCE THE BENEFITS

TO QUALIFY, YOU MUST

- Be a Duke Energy residential customer in North or South Carolina
- Have one of the following: electric heat, electric water heater or central air
- Own a single-family home and have lived there for at least four months (rental properties and mobile homes do not qualify)

Name on Account

| Address | |
|---------------|-------|
| City | State |
| Daytime Phone | |
| Evening Phone | |

County of Residence

Account Number

VISIT WWW.DUKE-ENERGY.COM TO SIGN UP OR CALL 1-877-388-7676 (TOLL FREE) OR RETURN THIS CARD.

Zip

- A trained Energy Specialist will look for energy issues in your home at no cost to you
- Learn how you can improve your home and save energy with a customized report
- Improve the comfort of your home
- Receive a free Energy Efficiency Starter Kit Help preserve the environ-
- ment for the future and keep electric costs low



080099 - Carolinas - Revised 5/09







EY573 / 139 East Fourth Street Cincinnati, OH 45202





Residential Energy Assessments

HEHC On-Site Report

| 0 | ISITE REPORT | USE CALL | | Energy. |
|------|---|---|---|---|
| Cus | tomer Name | | | |
| Stat | te Ao | count # | Date | Home Size |
| 1. | Home shell insulation. I Your home insulation ne insulation around the pe | Home insulation helps ke eds: a) none, b) attic, c) arimeter of the crawl space | ep heated or air conditioned a wall cavity, d) basement wall e. | air from getting out of your home. insulation, e) floor insulation or |
| 2. | Home shell air tightnes home. Your home sealir e) seal leaky attic access source of outside air infi | s. Air leaks in your home Ig needs: a) none, b) seal s, f) seal leaky plumbing, Itration was discovered ar | allow conditioned air to esca leaky windows c) seal leaky electrical, ceiling lights or oth nd should be sealed. | pe and outside air to invade your doors, d) seal leaky fireplace, ner openings in shell, g) a major |
| 3. | Duct insulation. If your need to be well insulate insulation, d) crawl spat | heating/cooling duct syste d to R-19. Your duct insu ce or basement ducts or ir | em is outside of your home's lation needs: a) no action, b) nsulate perimeter walls and s | heated or cooled space, the ducts attic duct insulation, c) garage duct eal space. |
| 4. | Duct air tightness. Heat is not located in your ho c) garage ducts sealed, | ting and cooling duct systeme's heated or cooled sp. d) a major duct repair is r | ems should be relatively airti ace. Your duct sealing needs: needed to seal your system. | ght, especially if the duct system a) no action b) attic ducts sealed, |
| 5. | Heat pump condition. A efficiency, b) an accepta be an acceptable age bu a new heat pump will g | n electric heat pump is w ible age and working, c) c it may need to be serviced ive you significant energy | ery energy efficient. Your hea could not test heat pump to s d, e) appears to be old or you savings. | t pump appears to be: a) high ae if it is working, d) appears to a have no heat pump now. Installing |
| 6. | Furnace filter. A dirty fu acceptable, b) needs att | mace filter can reduce you ention. (Needs cleaned or | ur heating and cooling efficie r replaced or the filter area ne | ncy. Your furnace filter: a) appears veds repair.) |
| 7. | Crawl space vents. You Your home: a) has no cr in summer, c) close ven | r crawl space or basemen awl space, no crawl spac ts in winter, d) a significa | it vents should be closed duri se vents or vents are always o nt crawl space or basement s | ng the winter heating season. losed, b) consider closing vents ealing repair is needed. |
| 8. | Summer window shadii is on: a) window coverin c) shading rarely used, a | ng, Air conditioning costs ngs are usually fully drawn d) significant east/west, u | can double if direct sunlight n or you have no air condition n-shaded solar exposure. | is not blocked. When air conditioning ning, b) window shades half drawn, |
| 9. | Furnace fan run time. F electric bill. Your furnace d) set to "auto" half the | tunning your furnace fan e fan is: a) you have no o time and "on" half the tim | all the time may increase you entral fan b) ECM fan, c) alw ne, e) always set to "on". | ir comfort, but it also adds to your ays set to "auto" (cycling off and on) |
| 10. | Hot water. Do not overh the wash and rinse cycli degrees, b) all washing loads from hot to cold. | eat your water. Today's la es in your clothes washer, and rinsing is in cold wat | undry detergents allow for er : For your laundry: a) reduce er, c) change wash loads fror | ergy savings by using cold water for your water heater temperature to 120 n hot to warm or cold, d) change rins |
| 11. | Extra refrigerator, If you | and addresses in an | t nonded in all concore, unel | upping it or removing it will save you |

080097 -- Revised 10/08

A. Description

The Residential Smart Saver[®] Energy Efficiency Program is an energy conservation program in North Carolina and South Carolina where incentives are paid to residential customers.

<u>CFLs</u>

This program is designed to offer incentives to customers and increase energy efficiency by installing CFLs in high use fixtures in the home. The incentives were offered in a variety of ways, including but not limited to "free" coupons, business reply cards (BRC) and IVR/WEB/OLS on-demand ordering tool. The new channels allowed us to increase impacts, encourage our customers to become more energy efficient and lower program costs. The benefits include being

- easier for the customer to participate
- able to manage inventory demand
- able to simplify coordination of the program
- able to realize results on a quicker timeline

Examples of recent channels include:

1. <u>GE/Wal-Mart Coupon</u> – Duke Energy (DE) mailed a "free" coupon to eligible residential customers which was redeemable at Wal-Mart. The offer was for a six pack of GE Energy Smart CFLs.

2. **BRC (Business Reply Card)** – Duke Energy mailed a business reply card to eligible customers to "opt-in" and request a free six pack of CFLs to ship directly to their homes at no additional cost. Each BRC contained a unique barcode to track requests to a Duke Energy account number. Kits were fulfilled by a 3rd party vendor and results were available within weeks of the order.

3. **IVR/WEB/OLS (CFL offer)** – Duke Energy currently provides eligible customers with three new channels options to request free CFLs to ship directly to their home at no additional cost:

- a. The IVR (Interactive Voice Response) consists of a toll free phone number for Duke Energy customers to use for account validation and to determine how many bulbs they are eligible to order. Customers acknowledge the order and Duke Energy processes the file to be fulfilled by a 3rd party vendor. The file will go directly to the vendor (processed daily) to speed up the ordering process.
- b. The WEB consists of screens that walk a customer through the CFL ordering process. Customers enter their account number or phone number plus last four digits of their social security number to check eligibility. Customers will then see how many bulbs they qualify for. They have the ability to accept or decline the order and then proceed to check out.
- c. OLS (On line Services) customers (new and existing) will receive a "pop up" upon logging into OLS stating that they qualify for CFLs. They can choose to accept or decline. The same ordering process is identical to the WEB stated above. If an OLS customer declines upon logging into OLS, he / she will only see a "promo" box upon entering OLS during their next visit.

HVAC and Heat Pump

Incentives are paid to home builders, heating contractors and/or customers when high efficiency heat pumps or air conditioners are installed. The incentive is \$300 per installation and is designed to increase the efficiency of HVAC systems in new homes and for replacements in existing homes.

Duke Energy employs Wisconsin Energy Conservation Corporation (WECC) to promote and deliver several Duke Energy programs, including the Residential Smart Saver[®]. CustomerLink is another company that supports the program and is responsible for handling program related inquiries. WECC Representatives work closely with Trade Allies, such as heating contractors or builders, who are the direct interface with the residential customers. Once the home builder or customer decides to purchase a qualifying measure, an incentive application is prepared by the trade ally and sent to WECC. WECC receives and processes the incentive application from the trade ally and validates qualification. Once this is complete; they split incentive payments for existing homes are made by WECC to the heating dealer and customer. For new homes, the builder submits an application for a qualifying home and receives the entire \$300.

Audience

<u>CFL</u>

Eligible customers are those Duke Energy Carolinas residential customers who are served on a residential rate schedule from the Company's retail distribution system. Duke Energy promotes each campaign through various marketing channels including direct mail, online advertising, bill insert, bill message, mass media, press release, the Duke Energy website and other social media channels.

<u>HVAC</u>

Eligible customers are those Duke Energy Carolinas residential customers living in existing or building new owner-occupied residences, condominiums or mobile homes.

| \$ in millions | Vintage 1 Filed | Vintage 1 Actual | % of Target |
|-------------------------|-----------------|------------------|-------------|
| SC Nominal Avoided Cost | \$21.0 | \$115.5 | 550% |
| Program Costs** | \$5.8 | \$23.7 | 409% |
| Energy Impact (kW) | 10,894 | 43,751 | 402% |
| Energy Impact (kWh) | 79,662,163 | 464,293,288 | 583% |
| Units | | 7,788,241 | |

B & C. Impacts, Participants and Expenses*

* Numbers are rounded

** Program costs as filed do not include M&V. Actual program costs do not include overheads.

*** Data in table represents program performance from February 2010 – December 2010.

<u>CFL</u>

The Residential Smart Saver CFL program participation increased due to new offers and distribution channels (e.g., GE/Wal-Mart "free" Coupon, BRC, IVR/WEB/OLS online ordering tool). All eligible Duke Energy customers were targeted for the new CFL offers including Low Income customers. The new channels offered an easier way for Duke Energy customers to participate in energy efficiency programs. Response rates increased from 1.3 percent (traditional discounted coupons provided in 2009) to approximately 28 percent overall for new offers/channels in 2010.

Campaign Results Take Rate

1. GE/Wal-Mart coupon offer *

| | [CONFIDENTIAL] | | | | | |
|-------|---------------------|------------------------|-------------|-----------------|--|--|
| | | | | <u>Cost Per</u> | | |
| State | # of Coupons Mailed | Total Coupons Redeemed | % Take Rate | <u>Bulb</u> | | |
| NC | 1,008,866 | 255,378 | 25.30% | | | |
| SC | 290,343 | 76,163 | 26.21% | | | |

*Data in table represents Carolinas program performance from January 2010 – December 2010.

2. Business Reply Card *

| | [CONFIDENTIAL | | | | | |
|-------|------------------|---------------------|-------------|----------|--|--|
| | | | | Cost Per | | |
| State | # of BRCs Mailed | Total BRCs Redeemed | % Take Rate | Bulb | | |
| NC | 597,853 | 223,158 | 37.26% | | | |
| SC | 176,416 | 75,227 | 42.55% | | | |

*Data in table represents Carolinas program performance from January 2010 – December 2010.

3. IVR/WEB/OLS ordering tool *

| | | | [CONFIDENTIAI | | |
|----------------------|---------|-----------|---------------|--|--|
| Total Total Cost Per | | | | | |
| State | Orders | Bulbs | Bulb | | |
| NC | 217,260 | 2,860,570 | | | |
| SC | 73,418 | 961,172 | | | |

*Data in table represents Carolinas program performance from January 2010 – December 2010.

<u>HVAC</u>

Smart Saver Residential participation is higher than expected; however, as CFLs are the high volume measure of the Smart Saver program, the HVAC results are not easily identifiable in the numbers. Duke Energy more than tripled the expected participation of 4,001 heat pumps and air conditioners in 2010 and realized participation of 14,594. Variance from the estimated budget, participation and impacts are a result of greater than expected acceptance of the program by customers and participating trade allies. Another contribution to this success is the work done by WECC trade ally representatives in signing up approximately 580 participating trade allies in 2010 and over 880 trade allies since program start up in June 2009.

D. Qualitative Analysis

<u>Highlights</u>

CFL

Campaign success can be attributed to the no cost coupon offer by GE/Wal-Mart and the new channels offering "free" CFLs, which are delivered directly to the customer's home. The BRC and IVR/WEB channels allowed a "hassle-free" opportunity for customers to participate in the CFL programs without redeeming a coupon. Customers simply returned the postage paid BRC or utilized the IVR/WEB channels to opt-in for the CFLs. Inventory issues were eliminated by working with a 3rd party vendor to stock CFLs in advance to meet demand. One highlight for the new IVR/WEB/OLS channels is the ability for customers to check eligibility, order CFLs, and track the status of their order; from requested date to delivery. The IVR/WEB/OLS channels allow Duke Energy to utilize low-cost, no-cost marketing channels to reach eligible customers who have not participated in traditional coupon offers. Total bulbs distributed through CFL campaigns exceeded 7.8 million bulbs in 2010.

HVAC

One of the most important attributes to our success is the incentive given to our heating contractor or to the sales representative. This incentive motivates the sales person to pursue the high efficiency sale at every opportunity. It is also a fair compensation for the amount of time the sales representative has in completing the incentive application for the customer. Customers do not have the technical information we are requesting on the application form, so we ask the trade ally to do this for the customer. Another very important highlight of the program is the ability of the WECC trade ally representatives to be able to sign up almost every heating contractor doing business in the Duke Energy service territory. To date we have over 880 participating trade allies signed up in North Carolina and South Carolina.

<u>Issues</u>

CFL

The GE/Wal-Mart coupon offer was very successful and the response rate was higher than anticipated. Managing inventory to meet the high demand during the first phase of the coupon mailing was a challenge. Although coupon mailings were staggered over several weeks, some stores depleted their inventory which created a less than ideal customer experience. Duke Energy worked with GE and Wal-Mart to quickly address the inventory issue. GE extended the expiration date of the coupon, offered substitute products, transferred inventory from other store locations and shipped additional products to meet demand. Addressing the inventory issues and extending the campaign expiration date allowed customers additional time to redeem coupons contributing to positive results.

Potential Changes

CFL

1. **IVR/WEB/OLS (CFL offer)** – Duke Energy will continue to utilize the new channels available to eligible customers requesting free CFLs to ship directly to their homes at no additional cost. We will utilize new marketing channels to reach eligible customers in the Carolinas.

a. Additional marketing channels will consist of the following:

- i. Earned Media (Print, Press Release, TV, Radio)
- ii. Social Media (Twitter, Facebook, YouTube Video)
- iii. Duke Energy Web site (State Landing Pages, Portal Story, OLS Promo boxes, Optin E-mail)

- iv. Duke Energy Messaging Channels (Bill Messages, Bill Insert, Bill Envelopes)
- v. Print (Direct Mail piece, Event/Low Income Agency Postcard)

2. **Property Manager** – Duke Energy has selected Honeywell as the vendor to manage the distribution of CFLs to property managers. Honeywell will partner with North Carolina and South Carolina property managers to enroll multi-family complexes that will install CFLs. Duke Energy pays for the bulbs and the Property Manager pays for the shipping costs. The goal is to identify the number of units and permanent fixtures available with each apartment unit. Property Managers will install CFLs into the permanent fixture during their routine maintenance visits and provide tracking for each unit and the number of bulbs installed. Honeywell will validate and report the activity for each individual unit on the property.

HVAC

Program enhancements currently being considered include developing an electronic application submission process to allow for easier, quicker and more efficient submission of customer applications. Additional measures are currently being developed that are complimentary to the Smart Saver® HVAC program. The new services would further incentivize customers to increase their home's efficiency of through measures such as attic insulation and air sealing, duct sealing, and HVAC tune ups.

E. Marketing Strategy

CFL

The overall strategy of this program is to reach residential Duke Energy customers who have not adopted the installation of CFLs. This is an easy and low cost way to become energy efficient without sacrificing comfort. We will continue to utilize new channels and educate customer on the benefits of CFLs while addressing barriers for consumers who have not purchased CFLs. The IVR/WEB CFL offer will use low/no cost channels to target DE customers. During the initial rollout, customers will hear about the offer through bill message, bill insert, e-mails Opt-in, internal employee communications; sponsorship programs/radio spots, tradeshow events and social media. As the program matures, additional channels will be utilized, such as, direct mail, e-mail and online advertising.

HVAC

This program is promoted by Duke, WECC and CustomerLink directly to HVAC contractors, builders and homeowners with aging equipment. All heating contractors and new home builders are encouraged to go to the Smart Saver[®] Web site and complete the Heating Dealer and Builder Sign up Form. All Participating Heating Dealers and Builders are included in an online list of participating trade allies.

The overall strategy for this program is to reach customers who are in need of an HVAC system and most importantly, to have our offer presented at the exact time a customer is deciding between a standard efficiency or high efficiency system. By keeping in very close contact with most all the significant trade allies in our service territory, we believe this program is being offered to nearly all customers who are making this decision. Program information is available to heating dealers, builders and customers via

our Web site. It is also available in a brochure that is offered from many sources. The text of this brochure is attached at the end of this document.

F. Measurement and Verification

Evaluation, Measurement and Verification Schedule

CFL

| Estimated 2011 | Estimated 2011 | Estimated 2012 | Estimated 2012 | Estimated 2013 | Estimated 2013 |
|-------------------|------------------|-------------------|------------------|-------------------|------------------|
| Process Reporting | Impact Reporting | Process Reporting | Impact Reporting | Process Reporting | Impact Reporting |
| Q2 | Q3 | Q2 | Q4 | Q2 | Q4 |

HVAC

| Estimated 2011 | Estimated 2011 | Estimated 2012 | Estimated 2012 | Estimated 2013 | Estimated 2013 |
|-------------------|------------------|-------------------|------------------|-------------------|------------------|
| Process Reporting | Impact Reporting | Process Reporting | Impact Reporting | Process Reporting | Impact Reporting |
| Q2 | Q3 | Q2 | Q4 | Q3 | Q4 |

Appendix



The coupon above is for the GE/Wal-Mart CFL offer. The coupon was mailed to 1,008,866 customers in North Carolina and 290,343 customers in South Carolina. The campaign ran from March 3, 2010 thru July 15, 2010. The offer was valid for a 'free' six pack of 13 watt CFLs.



The Business Reply Card (BRC) was mailed to 597,853 customers in North Carolina and 176,416 customers in South Carolina. The campaign ran from June 1 thru July 16, 2010. The offer was valid for a six pack of CFLs (three - 13 watt and three - 20 watt CFLs).





IVR/Web/Online Services Tool

- Has on-demand ordering and fulfillment capability
- Provides ability to check eligibility, place orders, and track order status
- Officially launched on November 2 in North Carolina
- Total bulbs orders for North Carolina 2,860,510; Total bulbs ordered in South Carolina 961,172



**Above is the 'draft' of the Low Income/Event Postcard that will be distributed during 2011 for the IVR/WEB campaign.

Brochure text for HVAC / Heat Pump:

RECEIVE A REBATE AND SAVE ON YOUR ENERGY BILL

SMART SAVER™ PROGRAM FOR EXISTING & NEW HOMES

Duke Energy encourages you to take advantage of our Smart Saver Program, which provides you an immediate rebate when you invest in a high efficiency heating or cooling system. And, with a high efficiency system, you'll experience savings on your home energy bills for years to come.

There are many new features in today's high efficiency heat pumps and air conditioners. This new technology will not only save you energy but it will also provide you greater comfort in your home.

By choosing a high efficiency system, you are helping to reduce our nation's need for energy, promote a clean environment and save valuable energy resources – now and in the future. You can find more information about Smart Saver, other energy efficiency programs, and ways to save energy and money at www.duke-energy.com/savings.

SMART SAVER REBATES*

You may qualify for a rebate in your existing home when you replace your heating and/or cooling system. New homes may also qualify when a new high efficiency heating and cooling system is selected. Choose a qualifying high efficiency air conditioner or heat pump listed in the chart below.

| Type of high efficiency heating or cooling system | Rebate amount to customer in an existing home | Rebate amount to builder of a new home** |
|---|---|--|
| New 14 SEER or greater air conditioner with ECM fan | \$200 | \$300 |
| New 14 SEER or greater heat pump with ECM fan. Heat Pump HSPF must be an 8.2 or greater. | \$200 | \$300 |
| New 11.5 EER or greater geo thermal heat pump with ECM Fan | \$200 | \$300 |

* Rebates are paid for each qualifying system if more than one system is used in the home.

** For new homes, rebates are made to the builder unless the builder agrees that the customer will receive the rebate.

SMART SAVER FREQUENTLY ASKED QUESTIONS How do I

qualify for the Smart Saver rebates?

Smart Saver rebates are available for Duke Energy customers who purchase a new high efficiency heat pump or air conditioner. Heat pumps and air conditioners must also be equipped with a high efficiency fan motor (ECM). The qualifying efficiencies are listed in the rebate table above.

Why should I consider spending more on a high efficiency system?

Your new air conditioner or heat pump is an important investment for your home. You can expect this new system to last about 15 years and many systems last even longer. Investing in more efficient technology now will help keep your energy bills lower for years to come.

What is a SEER or EER?

These are energy efficiency ratings to help consumers compare efficiency levels between all the available air conditioners and heat pumps. The higher the number, the less energy the system uses. The SEER or

EER rating provided by your installer should be certified by the Air-Conditioning and Refrigeration Institute (ARI).

What is HSPF?

This is an energy efficiency rating for heat pumps. The higher the number, the less energy the system uses while heating your home.

What is an ECM fan?

Most all heating and cooling systems use a fan to distribute the heating or air conditioning to all the rooms in your home. This is also referred to as the blower. The type of fan motor should be considered in the total energy required to heat and cool your home, as it can be a considerable expense on your energy bill. Today's new efficient fan motors are referred to as "ECM", which stands for Electronically Commutative Motor. Many people simply refer to these new motors as a "variable speed fan" but the ECM specification is required. In addition to saving you money, this new technology is quieter than traditional fan motors and will increase your family's comfort in many ways. Ask your heating contractor for more details.

I do not have a heat pump now. Should I consider one?

Yes. When it's time to replace your central air conditioner, you can instead choose an add-on heat pump to significantly lower your monthly energy costs. In addition to providing energy efficient cooling in the summer, there is no heating technology that is more efficient than a heat pump during most winter temperatures. In a "dual-fuel" system, where an electric heat pump works in conjunction with a gas or oil furnace, the more efficient heat pump is used for 60% to 75% or more of your total heating load, and your furnace is used only on the coldest days.

A. Description

The purpose of the Low Income Energy Efficiency and Weatherization Assistance Program is to assist low income customers with energy efficiency measures to reduce home energy usage. There are three separate offerings currently in the program: weatherization, refrigerator replacement, and the agency assistance kit.

Weatherization and Equipment Replacement Assistance is available for up to 5,000 qualified customers on the Duke Energy Carolinas' system in existing, individually metered, owner-occupied single-family, all-electric residences, condominiums, and mobile homes.

- Funds are available for (i.) weatherization measures, and/or (ii.) refrigerator replacement with an Energy Star appliance, and/or (iii.) heating system replacement with a 14 or greater SEER heat pump. The measures eligible for funding will be determined by an energy audit of the residence.
- A home energy audit will be provided at no charge to the customer.
- Participants are not eligible for payments under any other Duke Energy Carolinas Energy Efficiency Program for the same energy efficiency measure provided under this program.

The Agency Assistance Kit provides products to qualified customers, such as energy efficiency starter kits and compact fluorescent light bulbs, not to exceed \$30.00 in value. The program is available to customers in existing, individually metered, residences, condominiums, apartments and mobile homes. Duke Energy Carolinas partners with local assistance agencies as the avenue to reach customers. Local assistance agencies submit an energy survey via a web based portal, Agency Assistance Portal. Duke Energy currently has over 150 agencies set up to complete surveys in the Carolinas. For completion of the survey, the customer and agency is eligible to receive an incentive. Eligible customers who complete the energy survey are mailed 12 compact florescent light bulbs. The local assistance agencies receive a monetary incentive for each completed survey.

Audience

Weatherization and Refrigerator Replacement

Availability of this program will be coordinated through local agencies that administer the state's weatherization program. These agencies must certify that the household income of the participant is between 150% and 200% of the federal poverty level.

Agency Assistance Kit

Any customer eligible for agency assistance may participate in the program.

B & C. Impacts, Participants and Expenses*

| \$ in millions | Vintage 1Filed | Vintage 1 Actual | % of Target |
|-------------------------|----------------|------------------|-------------|
| SC Nominal Avoided Cost | \$8.7 | \$1.7 | 20% |
| Program Costs** | \$2.7 | \$0.4 | 15% |
| Energy Impact (kW) | 4,725 | 666 | 14% |
| Energy Impact (kWh) | 35,318,559 | 7,183,049 | 20% |
| Units | | 10,197 | |

* Numbers rounded

** Program costs as filed exclude M&V. Actual program costs do not include overheads.

***Data in table represents program performance from February 2010 – December 2010.

The Weatherization and Refrigerator Replacement Program did not report any program participation or impacts because implementation was delayed. The huge increase in stimulus funding in the Carolinas and the change in qualifications made it difficult to incorporate the Duke Energy program into the expanded operations. The low income agencies in North Carolina and South Carolina requested that Duke Energy Carolinas delay the rollout until after stimulus funding expired. The programs have not incurred any expense since programs did not launch.

The number of agency assistance program participants has been significantly lower than projected. Low participation is due to several factors. The rollout of the program was implemented in a phased approach so the adoption was slower than anticipated. Duke Energy continued to work with local assistance agencies to increase program participation, but the agencies had a difficult time incorporating the added step into their process without increasing average customer handle time. The initial projections were overly optimistic and were developed before the current economic downturn. The economic downturn has increased the number of assistance requests at the agencies which forced many agencies to streamline operations to handle additional customers.

D. Qualitative Analysis

Issues

Duke Energy's rollout plan includes coordinating the Weatherization Program through local agencies that administer the state Weatherization Program. The objective of the Duke Energy Carolinas' filed weatherization model includes complementing work being done with the existing weatherization network. Since the approval of Save-A-Watt, several major changes have occurred with the state's Weatherization Program. With such a substantial increase in funding, the opportunity for Duke Energy to complement the state's program has been impacted.

With an increase in weatherization funding from the Department of Energy (DOE), the existing state program must undergo more complex requirements to provide services to eligible customers. The American Recovery and Reinvestment Act (ARRA) stimulus dollars were released in 2009 and had the ability to be spent from that point through March 2012. With the approval of ARRA funding, the state weatherization funding has increased by over 500% from traditional funding levels. Due to such a significant increase in funding, the opportunity and need to "piggyback" the existing network is limited.

Duke Energy continues to communicate with state contacts from both NC and SC to identify opportunities to implement Duke Energy Carolinas income-qualified weatherization programs. The feedback from both states requested that Duke Energy delay the launch of programs until after March 2012 when ARRA funds expire.

Other challenges involving program implementation include the following components:

• ARRA presents additional challenges related to reporting as well as challenges that deal with requirements for both local and state agencies. Because of Duke Energy Carolinas restrictions in filing, weatherization agencies could only piggyback Duke Energy Carolinas program measures in total electric homes. This stipulation adds a level of complexity when measures can't be installed in all Duke Energy homes regardless of the energy source.

• Duke Energy's customer eligibility for program participation is not consistent with the eligibility of the state's weatherization program. This impacts the qualification process for Duke Energy program participants. The income eligibility for state funded weatherization applies to all customers up to 200% of the federal poverty level. Duke Energy's current program eligibility applies to all-electric homes which are owner occupied between 150% and 200% of the federal poverty level. To reduce complexity, Duke Energy Carolinas plans to align customer eligibility with state requirements.

For agency assistance kits, local assistance agencies have been slow to adopt the offering of survey completion to eligible customers. Due to the economic downturn, the number of customers visiting local assistance agencies has increased. Some agencies have reported a 200% increase in client visits. Duke Energy continues to explore avenues to increase program participation for low income customers. With the implementation of the IVR/Web CFL program, customers may request CFLs, track their order and determine the number of bulbs they are eligible to receive from the comfort of their home. This channel was implemented in fourth quarter of 2010 and demonstrated wide adoption to all segments including income qualified customers. In 2010, the non-low income CFL distribution channels reached over 300,000 low income customers.

Potential Changes

Duke Energy continues to evaluate opportunities to provide new offerings to low income customers in the most cost effective manner. Duke Energy plans to provide notification to discontinue offering the agency assistance kits. The offering of CFLs via the IVR/Web channel has reached more low income customers than the Low Income CFL program. The IVR/Web offering is a more cost effective avenue to reach low income customers.

Duke Energy plans to file for a new Low Income Neighborhood program. This program will target neighborhoods where the majority of the residents are below 200% of the federal poverty guidelines. This Low Income Neighborhood program is being modeled after a program currently offered by Progress Energy.

E. Marketing Strategy

Customer participation is achieved by working with local assistance agencies. All marketing of the program is conducted by each local assistance agency who offers the program to eligible customers. Some agencies offer the program to each client while others provide signage promoting the program. Appendix A includes an example of information shown by a local assistance agency promoting the program. This information is presented on wide screen monitors located in the lobby of the agency.

| Estimated 2011 | Estimated 2011 | Estimated 2012 | Estimated 2012 | Estimated 2013 | Estimated 2013 |
|-------------------|------------------|-------------------|------------------|-------------------|------------------|
| Process Reporting | Impact Reporting | Process Reporting | Impact Reporting | Process Reporting | Impact Reporting |
| Q4 | Q4 | Q1 | Q4 | Q3 | Q3 |

F. Measurement and Verification Evaluation, Measurement & Verification Schedule

Appendix A

Low Income CFL Promotion Material



A. Description

The Energy Efficiency Education Program for Schools is an energy conservation program available in NC and SC. The program currently focuses on third and fourth grade students with select schools participating in a pilot for kindergarten and first grade. The program educates students on energy efficiency in homes and schools through innovative lessons based upon science and math related curriculum. Education materials focus on concepts, such as renewable fuels and energy conservation and include interactive activities, such as online home audits that engage families in the learning experience. Students may also assist in assignments such as conducting energy assessments of their schools.

Duke Energy partnered with Scholastic to develop the curriculum and to promote and deliver the program to schools, teachers and families. Scholastic employs other third party vendors to assist in data and customer service management operations.

Audience

Eligible participants are residential customers that have students enrolled in K12 public and private schools and reside in households served by Duke Energy Carolinas. Each eligible student who completes a home energy survey will receive energy efficiency measures in an energy efficiency starter kit. Similarly, through student and family participation, students' classrooms are eligible to receive additional educational incentives such as school science lab kits or science books.

| \$ in millions | Vintage 1 Filed | Vintage 1 Actual | % of Target |
|-------------------------|-----------------|------------------|-------------|
| SC Nominal Avoided Cost | \$13.7 | \$2.1 | 15% |
| Program Cost** | \$4.0 | \$2.0 | 50% |
| Energy Impact kW | 8,138 | 1,158 | 14% |
| Energy Impact kWh | 50,547,245 | 6,240,039 | 12% |
| Units | | 19,908 | |

B & C. Impacts, Participants and Expenses*

* Numbers rounded

**Program costs as filed do not include M&V. Actual program costs do not include overheads.

*** Data in table represents program performance from February 2010 – December 2010.

Variance

The Energy Efficiency Education Program for Schools incurred significant start up costs that covered initial curriculum development, printing and distribution of materials, the hiring of field personnel as well as general marketing and outreach. Due to circumstances such as delayed regulatory approvals for Duke Energy Carolinas, longer than anticipated adoption among schools, overall lower than expected participation and slow distribution of energy measures into the home, the programs impacts were not able to positively offset expenditures.

The negative variance versus our budgeted levels of participation and impacts are a result of low participation and distribution of energy measures. One contributing factor to the programs underachievement was the channel acquisition process that required the engagement of multiple

audiences for program adoption. Despite positive feedback from teachers and focus groups (e.g. school administrators, teachers, families and students); the program struggled to effectively make it through the multi-level engagements required for success. However, as a result of extensive outreach and marketing efforts, several school districts are starting to adopt the program for district wide implementation, which should yield higher participation rates.

D. Qualitative Analysis

Highlights

One of the most important attributes to our success is the multi-level engagement concept of the program. The program offers free educational resources to classrooms that benefit teachers, schools, students and families complete with incentive offerings at varying levels of participation. Both the relevance of the materials supporting state academic standards and ease of curriculum delivery makes it an attractive program for teachers to implement. Furthermore, parents can participate in their student's learning efforts through completing a home energy survey that provides tangible information to help families manage their energy usage. Another very important highlight of the program is the ability for Duke Energy to track, at the household level, impacts achieved from energy measures distributed into homes through data obtained from the home energy questionnaire found in the Energy Efficiency Starter Kits. Since January 2010 through December 2010, we had over 11,411 families participate in the program in the Carolinas.

As a result of the innovative approach to bringing energy efficiency education to schools, the program was recognized by the Association of Energy Service Professionals 2009 Spring Implementation Conference: The Secrets to Successful Energy Efficiency Program Implementation. E-Source also recognized Duke Energy for the development and implementation of this program as well.

<u>Issues</u>

Program challenges stem around customer acquisition through the school channel. Effective implementation requires multiple audience engagement (e.g. administrators, teachers, students and parents). It can be challenging to get obtain immediate adoption due to a variety of factors:

- different directives and priorities from school administrators
- curriculum flexibility among teachers to incorporate an optional program
- student enthusiasm
- awareness and buy-in from parents to complete the home energy surveys with their children

Other challenges involving program adoption included program components like

• The home energy survey. Feedback has suggested that families may not be as comfortable completing the survey due to its length and types of information required, such as an account number or last 4 digits of the account holder's social security number. The information requested was patterned from existing programs that had a survey component and required capturing similar customer data for market research and fulfillment purposes. However, the survey was perceived differently in the school channel. The survey was revised, eliminating the last 4 digits of the account holder's social security number, along with reducing the number of survey questions from 30 to 6. Thus far, survey participants have slightly increased in volume beginning in October 2010.

- Rebranding the program during the initial launch due to issues surfacing under the original name. Therefore, as of June 2010, the program was re-launched under a newly trademarked name, "Power in Energy."
- District adoption requires establishing relationships with varying levels of the education community and ensuring there is buy-in and awareness of the program's offering before teachers can implement it. This type of networking and engagement take time to build. A top- down approach will maximize outreach.

Potential Changes

The program is undergoing several enhancements to improve visibility in the school market place and generate greater teacher and family adoption. Those enhancements could include:

- Revising both (Duke Energy and Scholastic) supplemental Web sites, banner ads and creating blogs for teacher postings.
- Offering more teacher trainings; online and in-person.
- Modifying participant incentives.
- Implementing a robust marketing partnership with community organizations.
- Leveraging and building upon field coordinators' educator/administrator networks for stronger marketing and promotion.
- Building an online reporting tool identifying county, district, school and teacher adoption rates. This tool will also hold household customer data, as well as those that may be disqualified for any reason.

E. Marketing Strategy

This program is promoted primarily by Scholastic with Duke Energy involvement. Scholastic develops educational materials and direct mails the education kits to teachers within the targeted K12 grades of schools served within the Duke Energy Carolinas territory. The education materials are complete with all the necessary resources to immediately use for a full class. Additional marketing channels used include websites with educational links, games, contact information, state field coordinators for inperson training and program demonstrations, program pamphlets, brochures, trinket items and family take home materials.

The strategy for this program is to provide energy education to students attending a K12 Duke Energy school in NC or SC and to encourage installation energy efficiency measures in customer homes. Key components include:

- Improving Web sites and curriculum materials.
- Simplifying the survey component.
- Adding Banner and Multi-media ads.
- Leveraging Duke Energy Business/Community Relations network.
- Conducting more face to face field coordinator market outreach in schools and within education community.
- Developing stronger engagement/marketing to families.

- Revising incentives to better influence the installation of measures.
- Streamlining operational processes.

By keeping the program all inclusive of these audiences, it aids in the sustainability of the program and its message.

Program information is available on our Web sites: www.duke-energy.com/kidswithenergy and www.scholastic.com/energysmart.

F. Measurement and Verification

Evaluation, Measurement & Verification Schedule

| Estimated 2011 | Estimated 2011 | Estimated 2012 | Estimated 2012 | Estimated 2013 | Estimated 2013 |
|-------------------|------------------|-------------------|------------------|-------------------|------------------|
| Process Reporting | Impact Reporting | Process Reporting | Impact Reporting | Process Reporting | Impact Reporting |
| Q2 | Q3 | Q2 | Q2 | Q2 | Q3 |

Appendix A

Energy Efficiency Education Program Sample Education Materials











Power Manager[®]

A. Description

The purpose of the Power Manager program is to reduce electric demand by cycling residential air conditioning usage during peak demand conditions in the summer months. The program is offered to residential customers with central air conditioning. Duke Energy installs a load cycling device to the outdoor unit of a customer's air conditioner. This enables the customer's air conditioner to be cycled off and on when the load on Duke Energy's system reaches peak levels. Customers receive financial incentives for participating in this program. The customer receives a yearly \$8 per month bill credit in the months of July through October for their program participation.

The cycling of the customer's air-conditioning system has shown that there is no adverse impact on the operation of the air-conditioning system. However, customers can opt out of the program if desired. The load control device has built-in safe guards to prevent the "short cycling" of the air-conditioning system. The air-conditioning system will always run the minimum amount of time required by the manufacturer. The cycling simply causes the air-conditioning system to run less, which is no different than what it does on milder days. Additionally, the indoor fan will continue to run and circulate air during the cycling event.

<u>Audience</u>

This program is available to North Carolina and South Carolina residential customers residing in owner-occupied,

single-family residences with a functioning outdoor air conditioning unit.

| \$ in millions | Vintage 1 Filed | Vintage 1 Actual | % of Target |
|-------------------------|-----------------|---------------------|-------------|
| SC Nominal Avoided Cost | \$22.8 | \$18.1 | 79% |
| SC Program Costs** | \$14.5 | \$8.6 | 59% |
| SC Impact (kW) | 305,553 | 231,882 | 76% |
| Units | | 238,769 | |

B & C. Impacts, Participants and Expenses*

* Numbers are rounded.

** As-filed program costs do not include M&V. Actual program costs exclude overheads

*** Data in table represents program performance from February 2010 – December 2010.

<u>Variance</u>

As a result of lower than expected Power Manager enrollments, Duke Energy conducted customer research in early 2010. Results indicated three main drivers for the lack of enrollments: 1) the \$35 installation fee, 2) concern over loss of comfort, 3) environmental control and concern about the effect on their air conditioning equipment. The first two were the most-often cited reasons at forty percent (40%) and thirty-eight percent (38%) respectively. Marketing materials were changed to address these concerns. However, given the economy and the \$35 installation charge, new enrollments remain low, so acquisition has been minimized.

D. Qualitative Analysis

Power Manager®

<u>Highlights</u>

Participants in the Power Manager program allow Duke Energy to control their air conditioners during peak summer demand periods. For their participation in the program, customers receive \$32 each year through an \$8 credit on their July – October bills. Credits are given whether or not a Power Manager event occurs.

The summer of 2010 was the first summer in which Power Manager was available in both North Carolina and South Carolina. Due to the extreme heat and subsequent high electric demand; Power Manager was activated on eight different days in the Carolinas. During these events, Duke Energy cycled customers' air conditioning units off and on, helping shift demand and lowers the peak.

<u>Issues</u>

Given the low number of new enrollments, coupled with customers who left the program, customer participation declined from 179,000 to 176,000 in 2010.

Duke Energy is currently experiencing low response rates for signups. A survey was recently completed for the program. The survey's primary purpose is to determine why non-participating customers are not adopting the program and to make recommendations that can improve response rates. A significant barrier to participation is that customers pay a \$35 wiring charge after the device is installed for participation in the program.

Potential Changes

To help increase the response rates for direct mail campaigns for the Power Manager program, Duke Energy will provide notification prior to removing the \$35 installation fee from the program. In addition, Duke Energy is in the process of redesigning the brochures to enhance the environmental message and reassure customers that the program is safe for their equipment. Duke Energy Carolinas will minimize customer acquisition activities until the offer can be improved to attract more customers.

Duke Energy will utilize a proven quality assurance process to aggressively evaluate the existing devices to determine the reliability. The low-performing devices will be repaired or replaced.

E. Marketing Strategy

Direct mail marketing will be used when acquiring new customers for the program. Customers are targeted geographically, which allows for shorter customer wait time for installation and more efficient routes for the installers. Program information is also available to customers on the Power Manager Web site located at http://www.duke-energy.com/north-carolina/savings/power-manager.asp.

F. Measurement and Verification Evaluation, Measurement & Verification Schedule

| Estimated | Estimated 2011 | Estimated 2012 | Estimated 2012 | Estimated 2013 | Estimated 2013 |
|--------------|------------------|-------------------|------------------|-------------------|------------------|
| 2011 Process | Impact Reporting | Process Reporting | Impact Reporting | Process Reporting | Impact Reporting |
| Reporting | | | | | |
| Q2 | Q2 | Q1 | Q2 | Q1 | Q2 |

Home Energy Comparison Report Pilot

A. Description

The Home Energy Comparison Report (HECR) is a periodic comparative usage report that compares a customer's energy use to similar residences in the same geographical area. This report also gives customer specific energy saving recommendations to encourage energy saving behavior.

The reports are distributed in printed form up to 12 times per year (delivery may be interrupted during the off-peak energy usage months in the fall and spring.) The report's energy analysis content for each home is compared to the average energy use of neighbors in similar home types for the same period. Suggested energy efficiency improvements given the usage profile for that home are also provided. In addition, measure-specific coupons, rebates or audit follow-ups from other Company programs are offered to sample customers, based on the customer's energy profile.

Audience

The audience is South Carolina customers identified through demographic information that is likely to decrease energy usage in response to the information contained in the HECR report. These customers reside in individually-metered, owner-occupied, single-family residences receiving concurrent service from the Company. Focusing on owner-occupied residences predisposes the report recipient to invest in energy- saving technology. Analyzing only single-family residences eliminates the possibility of erroneous data caused by thermal transfer between adjacent units in multi-family structures.

B & C. Impacts, Participants and Expenses*

| \$ in thousands | Vintage 1 Actual** | | |
|---------------------------|--------------------|--|--|
| SC Nominal Avoided Cost | \$153 | | |
| Program Cost ¹ | \$17 | | |
| kW Impact | 555 | | |
| kWh Impact | 2,991,111 | | |
| Units | 7,899 | | |

*Numbers rounded

**This is a new pilot therefore there is no basis for comparison to as filed.

D. Qualitative Analysis

Highlights

The preliminary six month results show approximately 2% overall savings for pilot participants. The savings are consistent with results achieved from other utilities instituting similar programs. Early results have shown that some participants have reduced overall consumption up to 25% while others have actually increased consumption. These preliminary results indicate that the pilot participants viewed the average home as a target level for consumption. Customers, who achieved a reduction in consumption, tended to live in homes that exhibited consumption higher than the average home. Those that increased consumption tended to be in homes that consumed less than the average home.

¹ Program cost is reflective of 7 months of program operations. Program costs do not include overheads.

Home Energy Comparison Report Pilot

Issues

The Company has identified some pilot participants who increased their usage based on the average home being viewed. This is not the behavior that the Company wants to encourage with this Program.

Potential Changes

The Company plans to file for full commercialization of the program in Q3 of 2011 in both North Carolina and South Carolina. Based on final results and analysis of the EM&V, the program will make changes. The preliminary recommended changes include exploring the option of a targeting approach which will allow messaging to target specific customers that may be savers or gainers. The Company will test messaging to determine opportunity to decrease consumption for all participants.

E. Marketing Strategy

The marketing for the pilot consisted of proactive reports being distributed through direct mail. The Company is exploring the option of distributing reports via email.

F. Measurement and Verification

EM&V Schedule

| Estimated 2011 | Estimated 2011 | Estimated 2012 | Estimated 2012 | Estimated 2013 | Estimated 2013 |
|-------------------|------------------|-------------------|------------------|-------------------|------------------|
| Process Reporting | Impact Reporting | Process Reporting | Impact Reporting | Process Reporting | Impact Reporting |
| Q2 | Q3 | Q3 | Q1 – 2013 | Q3 | Q4 |