LAW OFFICE OF

ROBERT W. KAYLOR, P.A.

3700 GLENWOOD AVENUE, SUITE 330

RALEIGH, NORTH CAROLINA 27612

(919) 828-5250 FACSIMILE (919) 828-5240

A001111122 (010) 020 024

March 6, 2013

MAR 0 6 2013

Clerk's Othics
N.C. Utilities Commission

C 184 .

Gail L. Mount Chief Clerk Office of the Chief Clerk North Carolina Utilities Commission 4325 Mail Service Center Raleigh, NC 27699-4325

RE: Docket No. E-7, Sub 1031

Dear Mrs. Mount:

MM

AG

17 (C)(T)(1)

watson

POFFEU

HOOVER

a ricsa

505509)

JONES

Hillow

Green

Enclosed for filing is Duke Energy Carolinas, LLC's Application for Approval of Demand-Side Management and Energy Efficiency Cost Recovery Rider in the above referenced docket.

Exhibit 9 of the Direct Testimony of Timothy Duff is CONFIDENTIAL and is being filed under seal.

Also, Rider 5 work papers are enclosed on CD. - 1 CD Filed.

Sincerely,

Robert W. Kaylor

Pobert W. Keylon

Encls.

DOCKET NO. E-7, SUB 1031 MAR 0 6 2013

Clerk's Office . N.C. Utilities Commission

In the Matter of
Application of Duke Energy Carolinas, LLC
for Approval of Demand-Side Management
and Energy Efficiency Cost Recovery Rider
Pursuant to N.C. Gen. Stat. § 62-133.9 and
Commission Rule R8-69

)

N.C. Utilities Conn.

APPLICATION OF

DUKE ENERGY CAROLINAS, LLC.

FOR APPROVAL OF RIDER 5

Pursuant to N.C. Gen. Stat. § 62-133.9 and Rule R8-69 of the Rules and Regulations of the North Carolina Utilities Commission (the "Commission"), Duke Energy Carolinas, LLC ("Duke Energy Carolinas" or the "Company") hereby applies to the Commission for approval of its demand-side management ("DSM") and energy efficiency ("EE") cost recovery rider, Rider EE, for 2014 ("Rider 5"), which consists of four components relating to the save-a-watt pilot approved by the Commission in Docket No. E-7, Sub 831: (1) a prospective Vintage 4 (2013) component to recover the second year of estimated net lost revenues for Vintage 4 EE programs; (2) a prospective Vintage 3 (2012) component to recover the third year of estimated net lost revenues from customers who participated in the Company's Vintage 3 EE programs from July 1, 2012 through December 31, 2012; (3) an Experience Modification Factor ("EMF") component which consists of the participation true-up for Vintage 3 (2012); and (4) an EMF component which consists of adjustments to the previous participation true-ups for Vintage 2 (2011) and Vintage 1 (2009/2010). In addition, as the save-a-watt pilot expires at the end of 2013, the Company has filed for approval of its portfolio of new DSM and EE programs and a new cost recovery mechanism in Docket No. E-7, Sub 1032, to become effective January 1, 2014. Accordingly, Rider 5 includes the recovery of estimated costs associated with year one (calendar year 2014, or "Vintage 2014") of the new portfolio, as well as an incentive calculated pursuant to the proposed new mechanism.

In support of this Application, Duke Energy Carolinas respectfully shows the Commission the following:

Name and Address of Duke Energy Carolinas

1. The correct name and post office address of the Company are Duke Energy Carolinas, LLC, Post Office Box 1006, Charlotte, North Carolina 28201-1006.

Notices and Communications

2. The names and addresses of the attorneys of Duke Energy Carolinas who are authorized to receive notices and communications with respect to this Application are:

Lawrence B. Somers
Deputy General Counsel
Duke Energy Corporation
P. O. Box 1551
Raleigh, North Carolina 27602

Robert W. Kaylor Law Office of Robert W. Kaylor, P.A. 225 Hillsborough Street Hillsborough Place, Suite 160 Raleigh, North Carolina 27603

Molly L. McIntosh K&L Gates, LLP Hearst Tower, 47th Floor 214 North Tryon Street Charlotte, North Carolina 28202

Description of the Company

3. The Company is engaged in the generation, transmission, distribution, and

sale of electric energy at retail in the central and western portions of North Carolina and the western portion of South Carolina. It also sells electricity at wholesale to many municipal, cooperative, and investor-owned electric utilities. Duke Energy Carolinas is a public utility under the laws of North Carolina and is subject to the jurisdiction of this Commission with respect to its operations in this State. The Company also is authorized to transact business in the State of South Carolina and is a public utility under the laws of that State. Accordingly, its operations in South Carolina are subject to the jurisdiction of the Public Service Commission of South Carolina.

- 4. N.C. Gen. Stat. § 62-133.9(d) authorizes the Commission to approve an annual rider to the rates of electric public utilities to recover all reasonable and prudent costs incurred for the adoption and implementation of new DSM and EE programs. Recoverable costs include, but are not limited to, all capital costs, including cost of capital and depreciation expense, administrative costs, implementation costs, incentive payments to program participants, and operating costs. Such rider shall consist of the utility's forecasted cost during the rate period and an EMF rider to collect the difference between the utility's actual reasonable and prudent costs incurred during the test period and actual revenues realized during the test period. The Commission is also authorized to approve incentives for adopting and implementing new DSM and EE programs, including appropriate rewards based on capitalization of a percentage of avoided costs achieved by DSM and EE measures.
- 5. The Commission approved Duke Energy Carolinas' save-a-watt portfolio of DSM and EE measures in Docket No. E-7, Sub 831 on February 26, 2009, and approved the modified save-a-watt compensation mechanism, as set forth in the

Agreement and Joint Stipulation of Settlement between the Company, the Public Staff, and Southern Alliance for Clean Energy, Environmental Defense Fund, Natural Resources Defense Council, and the Southern Environmental Law Center ("Stipulation"), in its Order Approving Agreement and Joint Stipulation of Settlement Subject to Certain Commission-Required Modifications and Decisions on Contested Issues issued February 9, 2010 in Docket No. E-7, Sub 831. The approved cost recovery model provides that the Company will be compensated based on predetermined percentages of the Company's capacity- and energy-related "avoided costs," an estimate of the cost of supplying electricity. These percentages include 75% of avoided capacity costs for DSM programs, and 50% of the net present value ("NPV") of the avoided energy costs plus 50% of the NPV of avoided capacity costs for EE programs. The Commission also authorized the Company to recover net lost revenues for 36 months for each installation of an EE measure during a given vintage year.

6. The Commission-approved Stipulation provides for a series of participation true-ups that will be conducted to update revenue requirements, including net lost revenues, based on actual customer participation results for each vintage. The participation true-ups for each vintage will incorporate the difference between the amount of revenues that the Company is permitted to collect under the Stipulation based on actual participation levels applied to the initial assumptions of load impact or independently measured and verified results as described in the Evaluation, Measurement and Verification Agreement reached by the Company, Southern Alliance for Clean Energy

¹ As defined by the Stipulation, a vintage year is the twelve month period in which a specific DSM or EE measure is installed for an individual participant or a group of participants.

("SACE") and the Public Staff and approved by the Commission in its Order Approving DSM/EE Rider and Requiring Filing of Proposed Customer Notice issued November 8, 2011 in Docket No. E-7, Sub 979 ("EM&V Agreement").

- 7. In addition, in Docket No. E-7, Sub 1032, the Company applied for Commission approval of its portfolio of DSM and EE programs and new cost recovery mechanism to replace the save-a-watt pilot programs and modified save-a-watt cost recovery mechanism, respectively. The estimated revenue requirement for the new portfolio component of proposed Rider 5 includes an estimate of Vintage 2014 EE program costs plus an earned utility incentive, which is based on total program Utility Cost Test ("UCT") results, plus year one of net lost revenues. The EE revenue requirements are determined separately for residential and non-residential customer classes. Rider 5 also includes an estimate of Vintage 2014 DSM program costs plus an incentive, which is based on total program UCT results. The DSM revenue requirements are determined separately for residential and non-residential customer classes.
- 8. Rule R8-69(b) provides the Commission will each year conduct a proceeding for each electric public utility to establish an annual DSM/EE rider to recover DSM/EE related costs.
- 9. Pursuant to the provisions of N.C. Gen. Stat. § 62-133.9 and Rule R8-69, the Company requests the establishment of Rider 5 to recover the second year of net lost revenues for Vintage 4, a portion of the third year of net lost revenues for Vintage 3, the true-up/EMF for Vintage 3, and the true-up/EMF adjustment for Vintages 1 and 2, as provided by the Commission-approved modified save-a-watt compensation mechanism and Commission-approved EM&V Agreement. Though the Company filed its

application and supporting testimony and exhibits for the new cost recovery mechanism and portfolio of programs in a separate Docket (E-7, Sub 1032) to avoid confusion with the expiring save-a-watt pilot, because Rule R8-69 contemplates a single annual DSM/EE rider, the Company is seeking to include the rates associated with Vintage 2014 of the proposed portfolio and new mechanism in Rider 5.

10. Pursuant to the provisions of N.C. Gen. Stat. § 62-133.9 and Rule R8-69, the Company requests Commission approval of the following annual billing adjustments (all shown on a cents per kWh basis, including gross receipts tax and regulatory fee):

Residential Billing Factors	¢/kWh
Residential Billing Factor for Rider 5 Prospective Components	0.0269
Residential Billing Factor for Rider 5 EMF Component (Vintage 3 True-up)	0.0800
Residential Billing Factor for Vintage 2 True-up Adjustment	0.0364
Residential Billing Factor for Vintage 1 True-up Adjustment	0.0031
Residential Billing Factor for Vintage 2014 Prospective Component	0.3032
Residential Rider 5 (Total)	0.4495

Non-Residential Billing Factors for Rider 5 Prospective Components	¢/kWh
Vintage 3 EE participant	0.0071
Vintage 4 EE participant	0.0107

Non-Residential Billing Factors for Rider 5 EMF Component (Vintage 3 True-up)	¢/kWh
Vintage 3 EE participant	0.0719
Vintage 3 DSM participant	(0.0071)

Non-Residential Billing Factors for Vintage 2 True-up Adjustment			
Vintage 2 EE participant	0.0051		

Non-Residential Billing Factors for Vintage 1 True-up Adjustment	¢/kWh	
Vintage 1 EE participant	(0.0017)	

Non-Residential Billing Factors for Vintage 2014 Prospective Components	¢/kWh
Vintage 2014 EE participant	0.0892
Vintage 2014 DSM participant	0.0798

Consistent with the Commission's *Order on Motions for Reconsideration* issued on June 3, 2010 in Docket No. E-7, Sub 938, Rider 5 will be in effect for the twelve month period January 1, 2014 through December 31, 2014. Also in accordance with this Order, the test period for the Vintage 3 EMF component is the period from January 1, 2012 through December 31, 2012; the test period for the true-up adjustment related to Vintage 2 is the period from January 1, 2011 through December 31, 2011; and the test period for the true-up adjustment related to Vintage 1 is June 1, 2009 through December 31, 2010.

11. The Company has attached hereto as required by Rule R8-69, the direct testimony and exhibits of witnesses Kimberly D. McGee, Timothy J. Duff and Ashlie J. Ossege in support of the requested change in rates.

WHEREFORE, the Company respectfully prays:

That consistent with this Application, the Commission approves the changes to its rates as set forth in paragraph 10 above.

Respectfully submitted, this the 6th day of March, 2013.

Robert W. Kaylor

Law Office of Robert W. Kaylor, P.A. 225 Hillsborough Street, Suite 160

Raleigh, North Carolina 27603 Telephone: 919-828-5250

robert.kaylor@duke-energy.com

Lawrence B. Somers
Deputy General Counsel
Duke Energy Corporation
P. O. Box 1551
Raleigh, North Carolina 27602
Telephone: 919-546-6722
bo.somers@duke-energy.com

Molly L. McIntosh
K&L Gates, LLP
Hearst Tower, 47th Floor
214 North Tryon Street
Charlotte, North Carolina 28202
Telephone: 704-331-7547
molly.mcintosh@klgates.com

COUNSEL FOR DUKE ENERGY CAROLINAS, LLC

VERIFICATION

STATE OF NORTH CAROLINA (COUNTY OF MECKLENBURG)

MANAGING DIRECTOR, RATES of DUKE ENERGY CAROLINAS, LLC, applicant in the above-titled action; that she has read the foregoing Application and knows the contents thereof; and that the same is true of her own knowledge.

Jane L. McManeus

Sworn to and subscribed before me this the ______day of March, 2013.

Notary Public

My Commission Expires: Worker 31 20/3

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION DOCKET NO. E-7, SUB 1031

In the Matter of)	•
Application of Duke Energy Carolinas, LLC)	DIRECT TESTIMONY OF
for Approval of Demand-Side Management)	TIMOTHY J. DUFF
and Energy Efficiency Cost Recovery Rider)	FOR
Pursuant to N.C. Gen. Stat. § 62-133.9 and)	DUKE ENERGY CAROLINAS, LLC
Commission Rule R8-69)	•

I. <u>INTRODUCTION AND PURPOSE</u>

- 2 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- 3 A. My name is Timothy J. Duff. My business address is 526 South Church
- 4 Street, Charlotte, North Carolina 28202.
- 5 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
- 6 A. I am employed by Duke Energy Business Services LLC as General Manager,
- 7 Retail Customer and Regulatory Strategy.
- 8 Q. PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL
- 9 **QUALIFICATIONS.**

1

- 10 A. I graduated from Michigan State University with a Bachelor of Arts in
- Political Economics and a Bachelor of Arts in Business Administration, and
- received a Master of Business Administration degree from the Stephen M.
- Ross School of Business at the University of Michigan. I started my career
- ·14 ···· -- with-Ford Motor Company and worked in a variety of roles within the
- company's financial organization, including Operations Financial Analyst and
- Budget Rent-A-Car Account Controller. After five years at Ford Motor
- 17 Company, I started working with Cinergy in 2001, providing business and
- 18 financial support to plant operating staff. Eighteen months later I joined
- 19 Cinergy's Rates Department, where I provided revenue requirement analytics
- and general rate support for the company's transfer of three generating plants.
- After my time in the Rates Department, I spent a short period of time in the
- 22 Environmental Strategy Department, and then I joined Cinergy's Regulatory
- 23 and Legislative Strategy Department. After Cinergy merged with Duke

1		Energy Corporation ("Duke Energy") in 2006, I started a four-year stint as
2		Managing Director, Federal Regulatory Policy. In this role, I was primarily
3		responsible for developing and advocating Duke Energy's policy positions
4		with the Federal Energy Regulatory Commission. I was named General
5		Manager, Energy Efficiency & Smart Grid Policy and Collaboration in 2010
6		and assumed my current position of General Manager, Retail Customer and
7		Regulatory Strategy in 2011.
8	Q.	PLEASE DESCRIBE YOUR DUTIES AS GENERAL MANAGER,
9		RETAIL CUSTOMER AND REGULATORY STRATEGY.
10	A.	I am responsible for the development of strategies and policies related to
11		energy efficiency, smart grid and all other retail services.
12	Q.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS
13		COMMISSION OR ANY OTHER REGULATORY BODIES?
14	A: ·	Yes. I testified in Duke Energy Carolinas; LLC's ("Duke Energy Carolinas"
15		or the "Company") applications to update its demand-side management
16		("DSM") and energy efficiency ("EE") cost recovery rider, Rider EE, in
17		Docket Nos. E-7, Sub 941, E-7, Sub 979 and E-7, Sub 1001. I also have
18	•	testified in the following matters before the Public Utilities Commission of
19		Ohio: Case No. 11-4393-EL-RDR in support of Duke Energy Ohio, Inc.'s
20		("Duke Energy Ohio") EE portfolio and the associated recovery mechanism;
21		Case No. 12-1857-GE-RDR in support of Duke Energy Ohio's application to

true-up the recovery under its three-year long save-a-watt program; Case No.

10-2326-GE-RDR in support of the mid-deployment review of Duke Energy

22

23

Ohio's AMI/SmartGrid Program; and Case No. 11-5905-EL-RDR in support 1 2 of Duke Energy Ohio's application for a distribution decoupling mechanism. 3 I also testified in support of Duke Energy Indiana, Inc.'s EE portfolio and the 4 recovery mechanism for Core Plus EE programs in Indiana Cause No. 43955 5 and in support of its DSM 6 cost recovery filing specifically related to the 6 adjustment of annual incentive targets in Indiana Cause No. 43079. Finally, I 7 recently provided testimony in support of Duke Energy Kentucky, Inc.'s EE 8 portfolio and associated recovery mechanism in Kentucky Case No. 2012-9 00085. 10 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS 11 PROCEEDING? 12 Α. My testimony supports Duke Energy Carolinas' Application for approval of 13 Rider EE for 2014 ("Rider 5"). In particular, my testimony: (1) provides an 14 overview of the Commission's Rule R8-69 filing requirements; (2) gives a 15 synopsis of the EE and DSM programs included in the four vintages that 16 comprise the Company's save-a-watt pilot; (3) discusses our results to date; 17 and (4) presents an overview of how these results have affected the Rider 5 calculations. 18 PLEASE DESCRIBE THE EXHIBITS ATTACHED TO YOUR 19 Q. 20 TESTIMONY. Duff Exhibit 1 supplies, for each program, load impacts and avoided cost 21 Α. 22 revenue requirements by vintage. Duff Exhibit 2 contains a summary of net 23 lost revenues for the period June 1, 2009 to December 31, 2014. Duff Exhibit

3 contains the actual program costs for North Carolina for June 1, 2009 through December 31, 2012 and estimated costs for the Duke Energy Carolinas system for the twelve months ending December 31, 2013. Duff Exhibit 4 contains the found revenues used in the net lost revenues calculations. Duff Exhibit 5 supplies evaluations of event-based programs. Duff Exhibit 6 contains a discussion of the findings and results of the Company's programs and a comparison of impact estimates from the previous Duff Exhibit 7 contains the comprehensive list of all program modifications that have been made to the Company's portfolio of programs. Duff Exhibit 8 contains a summary of program performance and an explanation of the variances between the expected program results and the actual results. It is designed to create more transparency with regard to the factors that have driven these variances. Confidential Duff Exhibit 9 is a list of the Company's industrial and large commercial customers that have opted out of participation in the Company's DSM or EE programs and a listing of those customers that have elected to participate in new measures after having initially notified the Company that they declined to participate, as required by Commission Rule R8-69(d)(2). WERE DUFF EXHIBITS 1-9 PREPARED BY YOU OR AT YOUR **DIRECTION AND SUPERVISION?**

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

Q.

A.

Yes, they were.

II. RULE R8-69 FILING REQUIREMENTS

1 Q. WHAT INFORMATION IS THE COMPANY PROVIDING IN

2 RESPONSE TO THE COMMISSION'S FILING REQUIREMENTS?

- 3 A. The information for Rider 5 is provided in response to the Commission's
- 4 filing requirements contained in R8-69 (f)(1) and can be found in the
- 5 testimony and exhibits of Company witnesses Duff, McGee, and Ossege as
- 6 follows:

R8-6	9(f)(1)	Items 🌼	Location in Testimony
(i)		Projected NC retail sales for the rate period	McGee Exhibit 5
(ii)		For each measure for which cost recovery is re	equested through Rider 4:
(ii)	a.	Total expenses expected to be incurred during the rate period	Duff Exhibit 1
(ii)	Ъ.	Total costs savings directly attributable to measures	Duff Exhibit 1
(ii)	c.	Evaluation, Measurement, and Verification activities for the rate period	Ossege Exhibit 1
(ii)	d.	Expected summer and winter peak demand reductions	Duff Exhibit 1
(ii)	e.	Expected energy reductions	Duff Exhibit 1
(i	iii)	Filing requirements for DSM/EE EMF rider, i	ncluding:
(iii)	a.	Total expenses for the test period in the aggregate and broken down by type of expenditure, unit, and jurisdiction	Duff Exhibit 3
(iii)	b.	Total avoided costs for the test period in the aggregate and broken down by type of expenditure, unit, and jurisdiction	Duff Exhibit 1
(iii)	c.	Description of results from EM&V activities	Testimony of Ashlie Ossege and Ossege Exhibits A-H
(iii)	d.	Total summer and winter peak demand reductions in the aggregate and broken down per program	Duff Exhibit 1
(iii)	e.	Total energy reduction in the aggregate and broken down per program	Duff Exhibit 1
(iii)	f.	Discussion of findings and results of programs	Testimony of Tim Duff and Duff Exhibit 6
(iii)	g.	Evaluations of event-based programs	Duff Exhibit 5
(iii)	h.	Comparison of impact estimates from previous year and explanation of significant differences	Testimony of Tim Duff and Duff Exhibit 6

(iv)	Determination of utility incentives	Testimony of Kimberly McGee & McGee Exhibit 1
(v)	Actual revenues from DSM/EE and DSM/EE EMF riders	McGee Exhibit 3
(vi)	Proposed Rider 4	Testimony of Kimberly McGee & McGee Exhibit 1
(vii)	Projected NC sales for customers opting out of measures	McGee Exhibit 5
(viii)	Supporting work papers	CD accompanying filing

III. PORTFOLIO OVERVIEW

2 Q. WHAT ARE DUKE ENERGY CAROLINAS' CURRENT EE AND DSM

3 PROGRAMS?

1

- 4 A. The Company has two interruptible programs for non-residential customers,
- 5 Interruptible Service ("IS") and Standby Generation ("SG") that are accounted
- for outside of the modified save-a-watt mechanism approved by the
- 7 Commission in Docket No. E-7, Sub 831. Aside from IS and SG, the
- 8 following DSM and EE programs have been implemented by the Company in
- 9 its North Carolina service territory.

10 RESIDENTIAL CUSTOMER PROGRAMS

- Residential Energy Assessments
- Residential Smart \$aver® Programs
- 13 Low Income Energy Efficiency and Weatherization Assistance
- 14 Program
- Energy Efficiency Education Program for Schools
- My Home Energy Report
- Residential Retrofit Pilot Program¹

¹ This pilot program was not commercialized.

1		Low Income Neighborhood Program
2		Appliance Recycling Program
3		Power Manager
4		NON-RESIDENTIAL CUSTOMER PROGRAMS
5		Non-Residential Energy Assessments
6		Non-Residential Smart \$aver® Program
7		Smart Energy Now Pilot
8		• PowerShare®
9	Q.	ARE THESE SUBSTANTIVELY THE SAME PROGRAMS DUKE
10		ENERGY CAROLINAS RECEIVED APPROVAL FOR IN DOCKET
11	•	NO. E-7, SUB 831?
12	A.	Yes. While it is substantially the same portfolio of programs that were
13		approved in Docket No. E-7, Sub 831, the Company has made various
14		changes and measure additions to the existing programs, which are detailed
15		below. The Company has also added three new programs which were
16		approved by the Commission in 2012.
17	Q.	PLEASE DESCRIBE THE THREE NEW PROGRAMS THAT WERE
18		APPROVED AND ADDED TO THE COMPANY'S PORTFOLIO OF
19		PROGRAMS SINCE THE COMPANY'S LAST UPDATE.
20	A.	On February 22, 2012, in Docket No. E-7, Sub 1004, Duke Energy Carolinas
21		filed its application for approval of the Residential Low-Income
22		Neighborhood Program, which offers customers within targeted
23		neighborhoods (50% of residence at or below 200% of poverty level) an

energy assessment and a comprehensive package of easy to install EE measures. These directly installed EE measures may include, but are not limited to the following: energy efficient lighting, minor air infiltration reduction, hot water conservation measures, and HVAC filters. While the addition of the Residential Neighborhood Low-Income Program was approved by the Commission on June 19, 2012, due to unforeseen issues in vendor selection process, the program was not launched and offered to customers in 2012.

Also on February 22, 2012, in Docket No. E-7, Sub 1005, the Company filed its application for approval of the Residential Appliance Recycling Program, which is designed to achieve energy savings by permanently removing, retiring and recycling in an environmentally safe manner eligible operating appliances. The program will pay customers an incentive to turn in and recycle up to two operational appliances, including, without limitation, refrigerators and freezers, per year. The program was approved by the Commission on July 17, 2012 and was successfully launched in the Duke Energy Carolinas service territory in the fall of 2012.

The final program added by the Company in 2012 was the My Home Energy Report Program ("MyHER"). Based on the success and impacts of a pilot run of this program in South Carolina, on June 7, 2012, in Docket No. E-7, Sub 1015, the Company filed its application to add MyHER to its portfolio of programs offered in North Carolina. MyHER is an EE program that utilizes a personalized report with easy-to-read charts and visuals that

illustrate how a customer's home performed in the last month, and how it trended over time as compared to a peer group of homes of similar size, age, type of heating fuel and geography. The report utilizes social motivation by establishing a value for both an "Average Home" and an "Energy Efficient Home" within the peer group. The report then capitalizes on the engaged and motivated customer by providing targeted EE tips and actionable ideas to improve the efficiency of their home. The report recommendations are relevant to specific customers based on analysis of usage patterns, housing stock and available demographic data. The Commission approved MyHER on September 11, 2012, and the Company has received a great deal of positive feedback from customers after the Company began mailing reports to customers in the 4th Quarter of 2012.

5.

A.

13 Q. PLEASE DISCUSS THE PROGRAM MODIFICATIONS THAT HAVE 14 BEEN MADE SINCE THE COMPANY'S LAST UPDATE FILING.

The Company made modifications to the existing programs in its portfolio in two manners during 2012. First, prior to the Commission's July 16, 2012 approval of the Program Flexibility Guidelines as discussed below, the Company filed two separate applications to modify existing residential programs originally established and approved in Docket No. E-7, Sub 831. On February 21, 2012, Duke Energy Carolinas filed its application to revise its Power Manager Program to remove the \$35 customer fee associated with the necessary load control wiring, in order to increase customer participation. The Commission approved the modification on March 27, 2012. The second

application for modification pertained the addition of the "Tune and Seal Program (Measures)" to the existing Residential Smart \$aver Program. The Company's February 22, 2012 application sought to add five measures that complement its existing efficient air conditioner and heat pump incentives and was approved by the Commission on August 28, 2012.

The second manner by which the Company modified it existing portfolio of programs was through leveraging the Program Flexibility Guidelines. Pursuant to the Decretal Paragraph No. 5 in the Commission's November 8, 2011 *Order Approving DSM/EE Rider and Requiring Filing of Proposed Customer Notice* in Docket No. E-7, Sub 979 ("Rider 3 Order"), the Company along with Southern Alliance for Clean Energy ("SACE") and the Public Staff filed a Joint Proposal regarding the Commission approval of program modifications in Docket No. E-7, Sub 831. The Commission approved the Joint Proposal in its July 16, 2012 *Order Adopting Program Flexibility Guidelines* and established important clarity regarding the following:

- Program changes that should require regulatory approval by the Commission prior to implementation;
- Program changes that should not require Commission approval but should require advance notice be filed with the Commission prior to making such program changes; and

 Program changes that simply require inclusion in a quarterly report that will notify the Commission of all program changes made without Commission approval or advance notice.

A.

On October 15, 2012, Duke Energy Carolinas utilized the Program Flexibility Guidelines and filed the following Advanced Notice Program Modifications Reporting Templates in Docket No. E-7, Sub 831: (1) a template for the addition of specialty bulb measures to the Residential Smart \$aver Program; and (2) a template for the addition of 33 new measures to the Non-Residential Smart \$aver Program. No party filed comments with respect to the modifications, so the modifications became effective on December 1, 2012.

12 Q. HOW WILL THE REVENUE REQUIREMENTS FROM THESE 13 PROGRAMS BE ACCOUNTED FOR IN RIDER 5?

The impacts from the various program modifications are captured in the Vintage 3 true-up component of Rider 5. The nominal avoided cost benefits from any participation in 2012 associated with any of the modifications or program additions also will be captured in the Vintage 3 true-up component of Rider 5. The projected net lost revenues in 2012 and 2013 associated with the 2012 participation in the program modifications and/or additions and impacts are also reflected in the calculation of Rider 5.

IV. EE AND DSM PROGRAM RESULTS TO DATE

1	Q.	HOW MUCH ENERGY, CAPACITY AND AVOIDED COSTS WERE
2		SAVED AS A RESULT OF THE COMPANY'S EE AND DSM
3		PROGRAMS DURING VINTAGE 3?
4	Α.	During Vintage 3, Duke Energy Carolinas' EE and DSM programs delivered
5		nearly 490,000 kWh of energy savings and 712 MW of capacity savings,
6		which produced nominal avoided cost savings of over \$250 million.
7	Q.	HOW MUCH ENERGY, CAPACITY AND AVOIDED COSTS HAVE
8		BEEN SAVED AS A RESULT OF THESE PROGRAMS SINCE THE
9		BEGINNING OF THE SAVE-A-WATT PILOT?
10	A.	Since receiving approval for the save-a-watt pilot, the Company through its
11		EE and DSM programs has generated over 1,550 GWh of energy reductions
12		and nearly 840 MW of capacity reductions. These programs have also
13		generated over \$690 million in nominal avoided cost benefits for Duke
14		Energy Carolinas' customers.
15	Q.	HOW DO THESE RESULTS COMPARE WITH THE
16		PERFORMANCE TARGETS IN DOCKET NO. E-7, SUB 831?
17	A.	During the first three vintage years of the modified save-a-watt pilot, the
18		actual nominal avoided cost benefits generated by these programs are over
19		150% of the target to achieve shown in Exhibit B to the Agreement and Joint
20		Stipulation of Settlement between Duke Energy Carolinas, the Public Staff,
21		SACE, Environmental Defense Fund, Natural Resources Defense Council,
22 -		and the Southern Environmental Law Center filed June 12, 2009 in Docket
73		No. F-7 Sub 831. Similarly capacity impacts are nearly 115% of the original

target, and energy impacts are over 170% of the original target. However, the Company understands the economy, which affects customer income available for efficiency upgrades, and changing codes and standards may greatly affect Duke Energy Carolinas' ability to meet or exceed future targets. In fact, while the Company is exceedingly pleased with its 2012 accomplishments, it is important to note that its achievements were actually less than what it achieved in 2010 and 2011.

Q. DOES THE COMPANY EXPECT HIGHER-THAN-INITIALLY EXPECTED RESULTS TO CONTINUE IN LIGHT OF INCREASING

BUILDING CODES AND EFFICIENCY STANDARDS?

Α.

No. While Duke Energy Carolinas will continue to develop and offer new EE programs, the changes to building codes and efficiency standards for appliances and lighting, as well as market saturation, will reduce the impact or potentially eliminate some of the most cost-effective EE measures from the Company's current portfolio. For example, higher efficiency lighting over time will gradually become incorporated into the baseline standard beginning in late 2012, which going forward will likely diminish the impacts that CFLs will contribute to the energy savings attributable to many of the Company's most successful programs to date. The Company will need to continually add new measures, innovate its program design, and introduce new programs and measures in order to fill the performance gaps. For example, on October 15, 2012, the Company, utilizing the recently approved Program Flexibility Guidelines, filed an Advanced Notification Template that included the

addition of a number of specialty lighting measures. The addition of these lighting measures, many of which target sockets that its current residential lighting program CFLs do not, will drive additional lighting efficiency within the residential market.

5 Q. HAVE ANY PROGRAMS SIGNIFICANTLY OUT-PERFORMED

RELATIVE TO THEIR ORIGINAL ESTIMATES?

A.

A. Yes. The Company's portfolio continues to see the majority of its impacts delivered from lighting measures in both the residential and non-residential markets. For this reason, both the Residential Smart \$aver® Program and the Non-Residential Smart \$aver® Program have seen elevated participation and customers adopting measures at much higher rates than originally anticipated.

12 Q. HAVE ANY PROGRAMS SIGNIFICANTLY UNDERPERFORMED

13 RELATIVE TO THEIR ORIGINAL ESTIMATES?

Yes, the same two programs that substantially underperformed during Vintage 1 and Vintage 2 continued to underperform during Vintage 3. The Low Income Energy Efficiency and Weatherization Assistance Program continued to underperform in 2012 primarily due to the American Reinvestment and Recovery Act related funding provided by the federal government that has supplanted the Company's original program objectives. As stimulus funding ran out in late 2012, Duke Energy Carolinas began efforts to support its Low Income Energy Efficiency and Weatherization Assistance Program ramping back up in 2013.

The Energy Efficiency Education Program for Schools also continued to struggle in 2012 versus its original as-filed targets, but saw a dramatic improvement versus its performance in 2010 and 2011 due to the modifications made to the program in late 2011. Due to these continued struggles of its program vendor in 2010 and 2011, the Company switched to the National Theatre Company as the program vendor, which has allowed it to bring the program to market in a new way. Rather than delivering the curriculum to students in the traditional classroom setting, the new vendor puts on a live theatrical performance at a school assembly. This delivery approach is designed to be more engaging and to make learning about saving energy more fun for the students and has been very well received across the service territory by faculty, students, and parents. In 2012, Duke Energy Carolinas saw nearly an 1,100% increase in the EE impacts achieved through the program versus the results achieved in 2011.

1.

Α.

V. <u>RIDER IMPACTS</u>

16 Q. HAVE THE PARTICIPATION RESULTS AFFECTED THE VINTAGE 17 3 EXPERIENCE MODIFICATION FACTOR?

Yes. The Experience Modification Factor ("EMF") in Rider 5 accounts for changes to actual participation relative to the forecasted participation levels utilized in the Company's Vintage 3 Rider EE. As the Company receives actual participation information, Duke Energy Carolinas is able to update participation-driven actual avoided cost benefits and the net lost revenues derived from its EE and DSM programs. For example, as mentioned above,

and the Energy Efficiency Education Program for Schools have underperformed relative to their original participation targets. As such, their portions of the EMF will be reduced to reflect lower-than-anticipated participation. On the other hand, the Company saw higher-than-expected participation in its Non-Residential Smart \$aver® Custom Program and the CFL component of the Residential Smart \$aver® Program. These results will also be included in the Vintage 3 EMF to reflect actual participation.

9 Q. HOW ARE THE RESULTS OF EVALUATION, MEASUREMENT

AND VERIFICATION APPLIED TO THE COMPANY'S EE

PROGRAMS?

23 ·

Α.

As further explained in Witness Ossege's testimony, Evaluation, Measurement, and Verification ("EM&V") is a comprehensive assessment and data collection methodology utilized by the Company to determine the achieved load reductions, actual free ridership, and the effectiveness of program design for each measure or program. Pursuant to the agreement reached by the Company, SACE and the Public Staff and approved by the Commission in the Rider 3 Order ("EM&V Agreement"), for all EE programs, with the exception of Non-Residential Smart\$aver Custom Rebate Program and Low Income Energy Efficiency and Weatherization Assistance Program, EM&V results shall be applied retrospectively to the beginning of the program offering. For the purposes of the vintage true-ups, these initial EM&V results will be considered actual results for a program until the next

EM&V results are received. The new EM&V results will then be considered actual results going forward and applied prospectively for the purposes of truing up vintages from the first day of the month immediately following the month in which the study participation sample for the EM&V was completed. This EM&V will then continue to apply and be considered actual results until it is superseded by new EM&V results, if any.

For all new programs and pilots, the Company will follow a consistent methodology, meaning that initial estimates of impacts will be used until Duke Energy Carolinas has valid EM&V results, which will then be applied back retrospectively to the beginning of the offering and will be considered actual results until a second EM&V is performed. The Company believes that since the energy saving impacts underlying MyHER are based on the EM&V results from the pilot conducted in the South Carolina region of the Duke Energy Carolinas' service territory, the next EM&V will only need to apply back to the first day of the month after the sample was completed.

Q. HOW WILL EM&V BE INCORPORATED INTO THE VINTAGE 3

2 TRUE-UP COMPONENT OF RIDER 5?

1

13

14

15

16

17

18

19

20

21

22

23

A.

- 3 All of the final EM&V results that have been received by the Company as of Α. 4 December 31, 2012 have been applied prospectively from the first day of the 5 month immediately following the month in which the study participation 6 sample for the EM&V was completed in accordance with the EM&V 7 Agreement. So, for any program for which the Company has received EM&V 8 results, the per participant impact applied to the projected program 9 participation in Vintage 4 is based upon the actual EM&V results that have 10 been received.
- 11 Q. PLEASE DESCRIBE HOW FOUND REVENUES WERE
 12 CALCULATED.
 - Consistent with the "Decision Tree" found in Appendix A of the Commission's February 8, 2011 order in Docket No. E-7, Sub 831, possible found revenue activities were identified, categorized, and netted against the net lost revenues created by the Company's EE programs. Found revenues may result from activities that directly or indirectly result in an increase in customer demand or energy consumption within Duke Energy Carolinas' service territory. However, load-building activities such as these would not be considered found revenues per se if they (1) would have occurred regardless of the Company's activity, (2) were a result of a Commission-approved economic development activity not determined to produce found revenues, or (3) were part of an unsolicited request for Duke Energy Carolinas to engage in

an activity that supports efforts to grow the economy. On the other hand, found revenues would occur for load growth that did not fall into the previous categories but was directly or indirectly a result of Duke Energy Carolinas' activities. Additionally, the \$10,000 scrivener's error in the 2010 Vintage Year 1 Found Residential Revenues set forth in Duff Exhibit 2 in the Company's Rider EE application in Docket No. E-7, Sub 1001 has been corrected in this year's calculation of found revenue. Based on the results of this work, all potential found revenue-related activities are identified and categorized in Duff Exhibit 3.

A.

- Q. PLEASE DESCRIBE HOW THE COMPANY WORKED WITH THE PUBLIC STAFF AND SACE TO IMPROVE THE FORMAT USED TO REPORT THE PERFORMANCE OF THE DSM AND EE MEASURES, PROGRAMS, AND TOTAL PORTFOLIO.
 - In response to the Commission's *Order Approving DSM/EE Rider and Requiring Filing of Customer Notice* issued in Docket No. E-7, Sub 1001, in which the Commission directed the Company to work with the Public Staff and SACE to improve the format used to report the performance of the Company's DSM and EE measures, programs and total portfolio, the Company developed a template to be included in its annual Rider EE filings that would create more transparency regarding what factors were driving the variances between projected program performance and actual program performance. The Company shared the template with the Public Staff and SACE and has incorporated their suggested revisions. After working through

1 a number of iterations of the variance explanation template, the Company, 2 Public Staff and SACE reached agreement on a new exhibit to be included in 3 the Company's annual filing Rider EE filing – Duff Exhibit 8. 4 Q. HAS THE **OPT-OUT OF NON-RESIDENTIAL CUSTOMERS** 5 **AFFECTED** RESULTS THE FROM THE **PORTFOLIO** 6 APPROVED PROGRAMS? 7 A. Yes, the opt-out of qualifying non-residential customers has had a negative effect of Duke Energy Carolinas' overall non-residential impacts. 8 9 Vintage 3, the Company had 1,028 eligible customer accounts opt out of 10 participating in Duke Energy Carolinas' non-residential portfolio of EE 11 programs. While this represents only slightly over 10.5% of eligible customer 12 accounts, these same customer accounts represent nearly 44% of the load for 13 all eligible customers. Essentially, this means that Duke Energy Carolinas can 14 only deliver the efficiency benefits associated with its non-residential 15 programs to only slightly more than 55% of its non-residential customers. 16 O. WHAT HAS THE COMPANY DONE TO ENCOURAGE NON-RESIDENTIAL CUSTOMERS TO OPT-IN TO ITS PROGRAMS? 17 18 Duke Energy Carolinas continues to explore ways to make its non-residential Α. 19 programs more attractive to customers and hence reduce the number of 20 customers that choose to opt out. The Company evaluates a number of ways to make the improvements, whether it is through improving the delivery and 21

administration of the program, or by adding new measures that incorporate a

wider variety of energy efficient technologies. The Company has worked to

22

23

educate vendors, trade-allies, and suppliers to help them incorporate incentives from EE programs into their offers for customers. The Company has also improved its outreach activities, using its account managers, website portal, email, and traditional mail to notify customers of energy-saving opportunities. Finally, as previously mentioned, in 2012, Duke Energy Carolinas added over 30 new measures to the prescriptive component of its Non-Residential Smart \$aver Program through the Advanced Notification Template under the Program Flexibility Guidelines. The Company believes that on an on-going basis, the Program Flexibility Guidelines will enhance its ability to respond to changes in the non-residential market and the introduction of new technologies in a timelier manner.

VI. <u>CONCLUSION</u>

- 13 Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?
- 14 A. Yes.

Duff Eddbit 1 pg. 1

ĉ

Duke Energy Carolinas Actuals for June 1, 2009 to December 31, 2009 Docket Number 6-7, Sub 1031 Load Impacts and Avoided Cost Revenue Requirements by Program

NC Residential Avoided Costs NC Retail kWh Sales System kW Reduction System Avoided Cost System Energy Allocation Factor (McGee Residential Programs A * B Summer Peak Revenue Roquirement Reduction (kWh) Exhibit 5, Pg. 1) EE Programs (at 50% Avoided Cost) 1 Appliance Recycling 73.0077318% 2 Residential Energy Assessments 1.057 8,369,462 1.106.481 73.0077318% 3 Smart Sever® for Residential Customers s 807,817 1,592 12,547,819 1,940,744 73.0077318% 4 Low Income Energy Efficiency and Weatherization Assistance 1,416,893 143 1,354,096 141,337 5 Energy Efficiency Education Program for Schools 73.0077318% 103,187 56 303,763 55,373 73.0077318% 6 Residential Retroft Pilot 40,427 -. 73.0077318% 7 Home Energy Comparison Report (My Home Energy Report) 8 Total for Residential Conservation Programs 73.0077316% 2,849 22,575,141 3,243,936 2.368.324 NC Residential Peak Demand Allocation Factor (McGee Exhibit S. Pr. 1) 9 Total DSM Programs (at 75% Avoided Cost) 116,172 4,655,124 33.9010659% 1,578,137 **NC Non-Residential Avoided** Costs NC Retail kWh Sales System Avoided Cost System kW Reduction -System Energy Aflocation Factor (McGee A . B Revenue Requirement Summer Peak Reduction (kWh) Exhibit 5, Pg. 1) Non-Residential Programs EE Programs (at 50% Avoided Cost) 10 Smart Sever® for Non-Residential Customers Lighting 5,267 28,004,505 5,247,545 73.0077318% 11 Smart Saver® for Non-Residential Customers Motors 3,831,113 124 624,404 183,846 73.0077318% 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 134,222 73.0077318% 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 46 257,738 67,096 S 73.0077318% 14 Smart Saver® for Non-Residential Customers - HVAC 48,985 267 765,127 \$ 295,533 73.0077318% 15 Smort Sever® for Non-Residential Customers - Custom Rebate 215,762 19 232,797 30,165 73.0077316% 16 Smart Energy Now 22,023 73.0077318% 17 Total for Non-Residential Conservation Programs 5,724 29,884,571 5.824,184 4,252,105 NC Non-Residential Peak **Demand Altocation Factor** (McGee Exhibit 5, Pg. 1) A18" B18 18 Total DSM Programs (at 75% Avoided Cost) 116,172 \$ 4,655,124 39.9179344% 1,858,230 **NC Retail Peak Demand** Allocation Factor (McGoo Total DSM Program Breakdown Exhibit 5, Pg.1) A21° B21 19 Power Manager (Residential) 57.494 3.082.269 20 Power Share (Non-Residential) 58,678 1,572,855 21 Total DSM 116,172 4,655,124 73.8190004% 3,436,366

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

Note: Schedule may not foot due to rounding

Duff Exhibit 1 pg. 2

Duke Energy Carolinas Actuals for January 1, 2010 to December 31, 2010 Docket Mumber 5-7, Sub 1031 Load Impacts and Avoided Cost Revenue Requirements by Program

			•	· ·	
	í		ė		
	1			. ,	NC Residential Avoided
	ļ.			.*	Costs
I .				NC kWh Sales Aflocation	3
•		System Energy	System Avaided Cost	Factor (McGee Exhibit S,	A*B
•	System kW Reduction -	Reduction (kWh)	Revenue Requirement y	pg. 2)	
Residential Programs	Summer Peak	Keotemon (kwn)		* - 76	
EE Programs (at 50% Avoided Cost)	1			χ:	, ne
	} -	•	\$.	72.7072722%	,
1 Appliance Recycling	1,563	11,178,033	\$ 1,549,012	72,7072722%	\$ 1,126,244
2 Residential Energy Assessments	41,497	351,777,103	\$ 42,560,548	72.7072722%	\$ 30,944,614
3 Smart Sever® for Residential Customers	599	5,663,263	\$ 591,118	72.7072722%	\$ 429,786
4 Low Income Energy Efficiency and Weetherization Assistance	469	2,526,416	\$ 460,540	72,7072732%	\$ 334,846
5 Energy Efficiency Education Program for Schools		•,	ব ঃ ্ট	.72.7072 722%	5
6 Residential Retrofit Pilot	159	854,645	\$ 24,503	72.7072722%	\$ 17,816
7 Home Energy Comparison Report (My Home Energy Report)	44.285	401,999,461	45,185,722		\$ 32,853,306
8 Total for Residential Conservation Programs	:				<i>y</i>
	1			•	,
	· · · · · · · · · · · · · · · · · · ·	•••		NC Residential Peak	
	ĺ		*	Demand Allocation Factor	
•	1		1+	(McGee Exhibit 5, pg. 2)	A9 * 89
		, .	s· 23,515,262	34,4404513%	5 8.098,762
9 Total DSM Programs (at 75% Avoided Costs)	438,636		3 23,213,202	,	
	į.			*	.
	4				NC Non-Residential
	<u> </u>				Avoided Costs
	•				ALGED GOOD
,	ı		System Availded Cost	NC kWh Sales Adocation	A*D
• · · · · · · · · · · · · · · · · · · ·	System kW Reduction -	System Energy	Revenue Requirement	Factor (McGee Exhibit 5,	A-1
	Summer Peak	Reduction (kWh)		pg. 2)	
					
Non-Residential Programs					
			4 41770 002		\$ 9.968.234
EE Programs (at 50% Avoided Cost)	13,456	68,411,677	\$ 13,710,093	72.7072722%	\$ 9,968,234 c 580,553
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting	533	2,724,749	\$ 798,480	72.7072722%	\$ 580,553
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting	533 O	2,724,749 380	\$ 798,480 \$ 44	72.7072722% · 72.7072722%	\$ 580,553 \$ 32
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment)	533 0 155	2,724,749 380 788,310	\$ 798,480 \$ 44 \$ 191,588	72.7072722 % 72.7072722 % 72.7072722 %	\$ 580,553 \$ 32 \$ 139,298
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products	533 0 155 1,586	2,724,749 380 788,310 3,964,553	\$ 798,480 \$ 44 \$ 191,588 \$ 1,734,583	72.7072722% - 72.7072722% 72.7072722% 72.7072722%	\$ 580,553 \$ 32 \$ 139,298 \$ 1,261,168
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 14 Smart Saver® for Non-Residential Customers - HVAC	533 0 155	2,724,749 380 788,310	\$ 798,480 \$ 44 \$ 191,588	72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722%	\$ 580,553 \$ 32 \$ 139,298 \$ 1,261,168 \$ 2,623,397
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Motors 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 14 Smart Saver® for Non-Residential Customers - HVAC 15 Smart Saver® for Non-Residential Customers - Custom Rebata	533 0 155 1,586 2,716	2,724,749 380 788,310 3,964,553 21,205,380	\$ 798,480 \$ 44 \$ 191,588 \$ 1,734,583 \$ 3,608,163	72.7072722% - 72.7072722% 72.7072722% 72.7072722%	\$ 580,553 \$ 32 \$ 139,298 \$ 1,261,168 \$ 2,623,397 \$
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 14 Smart Saver® for Non-Residential Customers - HVAC 15 Smart Saver® for Non-Residential Customers - Custom Rebata 16 Smart Saver® for Non-Residential Customers - Custom Rebata	533 0 155 1,586	2,724,749 380 788,310 3,964,553	\$ 798,480 \$ 44 \$ 191,588 \$ 1,734,583	72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722%	\$ 580,553 \$ 32 \$ 139,298 \$ 1,261,168 \$ 2,623,397
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Motors 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 14 Smart Saver® for Non-Residential Customers - HVAC 15 Smart Saver® for Non-Residential Customers - Custom Rebata	533 0 155 1,586 2,716	2,724,749 380 788,310 3,964,553 21,205,380	\$ 798,480 \$ 44 \$ 191,588 \$ 1,734,583 \$ 3,608,163	72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722%	\$ 580,553 \$ 32 \$ 139,298 \$ 1,261,168 \$ 2,623,397 \$
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 14 Smart Saver® for Non-Residential Customers - HVAC 15 Smart Saver® for Non-Residential Customers - Custom Rebata 16 Smart Saver® for Non-Residential Customers - Custom Rebata	533 0 155 1,586 2,716	2,724,749 380 788,310 3,964,553 21,205,380	\$ 798,480 \$ 44 \$ 191,588 \$ 1,734,583 \$ 3,608,163	72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722%	\$ 580,553 \$ 32 \$ 139,298 \$ 1,261,168 \$ 2,623,397 \$
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 14 Smart Saver® for Non-Residential Customers - HVAC 15 Smart Saver® for Non-Residential Customers - Custom Rebata 16 Smart Saver® for Non-Residential Customers - Custom Rebata	533 0 155 1,586 2,716	2,724,749 380 788,310 3,964,553 21,205,380	\$ 798,480 \$ 44 \$ 191,588 \$ 1,734,583 \$ 3,608,163	72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722%	\$ 580,553 \$ 32 \$ 139,298 \$ 1,261,168 \$ 2,623,397 \$
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 14 Smart Saver® for Non-Residential Customers - HVAC 15 Smart Saver® for Non-Residential Customers - Custom Rebata 16 Smart Saver® for Non-Residential Customers - Custom Rebata	533 0 155 1,586 2,716	2,724,749 380 788,310 3,964,553 21,205,380	\$ 798,480 \$ 44 \$ 191,588 \$ 1,734,583 \$ 3,608,163	72.7072722% - 72.7072722% - 72.7072722% - 72.7072722% - 72.7072722% - 72.7072722% - 72.7072722% - NC Non-Basidential Peak Demand Allocation Factor	\$ 580,553 \$ 32 \$ 139,298 \$ 1,261,168 \$ 2,623,397 \$ 14,572,682
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 14 Smart Saver® for Non-Residential Customers - HVAC 15 Smart Saver® for Non-Residential Customers - Custom Rebata 16 Smart Saver® for Non-Residential Customers - Custom Rebata	533 0 155 1,586 2,716	2,724,749 380 788,310 3,964,553 21,205,380	\$ 798,480 \$ 44 \$ 191,588 \$ 1,734,583 \$ 3,608,163	72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722%	\$ 580,553 \$ 32 \$ 139,298 \$ 1,261,168 \$ 2,623,397 \$
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 14 Smart Saver® for Non-Residential Customers - HVAC 15 Smart Saver® for Non-Residential Customers - Custom Rebata 16 Smart Saver® for Non-Residential Customers - Custom Rebata	533 0 155 1,586 2,716	2,724,749 380 788,310 3,964,553 21,205,380	\$ 798,480 \$ 44 \$ 191,588 \$ 1,734,583 \$ 3,608,163	72.7072722% - 72.7072722% - 72.7072722% - 72.7072722% - 72.7072722% - 72.7072722% - 72.7072722% - NC Non-Basidential Peak Demand Allocation Factor	\$ 580,553 \$ 32 \$ 139,285 \$ 1,261,168 \$ 2,623,397 \$ 14,572,682
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 14 Smart Saver® for Non-Residential Customers - HVAC 15 Smart Saver® for Non-Residential Customers - Custom Rebata 16 Smart Saver® for Non-Residential Customers - Custom Rebata 17 Total for Non-Residential Conservation Programs	533 0 155 1,586 2,716	2,724,749 380 788,310 3,964,553 21,205,380	\$ 798,480 \$ 44 \$ 191,588 \$ 1,734,583 \$ 3,608,163	72.7072722% - 72.7072722% - 72.7072722% - 72.7072722% - 72.7072722% - 72.7072722% - 72.7072722% - NC Non-Basidential Peak Demand Allocation Factor	\$ 580,553 \$ 32 \$ 139,298 \$ 1,261,168 \$ 2,623,397 \$ 14,572,682
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 14 Smart Saver® for Non-Residential Customers - HVAC 15 Smart Saver® for Non-Residential Customers - Custom Rebata 16 Smart Saver® for Non-Residential Customers - Custom Rebata	533 0 155 1,586 2,716	2,724,749 380 788,310 3,964,553 21,205,380	\$ 798,480 \$ 44 \$ 191,585 \$ 1,734,583 \$ 3,608,163 \$ 20,042,949	72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% NC Non-Residential Peak Demand Allocation Factor (Excise Exhibit S, pg. 2)	\$ 580,553 \$ 32 \$ 139,298 \$ 1,261,168 \$ 2,623,397 \$ 14,572,682
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 14 Smart Saver® for Non-Residential Customers - HVAC 15 Smart Saver® for Non-Residential Customers - Custom Rebata 16 Smart Saver® for Non-Residential Customers - Custom Rebata 17 Total for Non-Residential Conservation Programs	533 0 155 1,586 2,716	2,724,749 380 788,310 3,964,553 21,205,380	\$ 798,480 \$ 44 \$ 191,585 \$ 1,734,583 \$ 3,608,163 \$ 20,042,949	72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% NC Non-Residential Peak Demand Allocation Factor (Excise Exhibit S, pg. 2)	\$ 580,553 \$ 32 \$ 139,298 \$ 1,261,168 \$ 2,623,397 \$ 14,572,682
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 14 Smart Saver® for Non-Residential Customers - HVAC 15 Smart Saver® for Non-Residential Customers - Custom Rebata 16 Smart Saver® for Non-Residential Customers - Custom Rebata 17 Total for Non-Residential Conservation Programs	533 0 155 1,586 2,716	2,724,749 380 788,310 3,964,553 21,205,380	\$ 798,480 \$ 44 \$ 191,585 \$ 1,734,583 \$ 3,608,163 \$ 20,042,949	72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% NC Non-Residential Peak Dermand Allocation Factor (McGee Exhibit 5, pg. 2) 40.3489126% NC Retail Peak Dermand	\$ 580,553 \$ 32 \$ 139,285 \$ 1,261,168 \$ 2,623,397 \$ 14,572,682
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 14 Smart Saver® for Non-Residential Customers - HVAC 15 Smart Saver® for Non-Residential Customers - Custom Rebata 16 Smart Saver® for Non-Residential Customers - Custom Rebata 17 Total for Non-Residential Conservation Programs	533 0 155 1,586 2,716	2,724,749 380 788,310 3,964,553 21,205,380	\$ 798,480 \$ 44 \$ 191,585 \$ 1,734,583 \$ 3,608,163 \$ 20,042,949	72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% NC Non-Residential Peak Demand Allocation Factor (McGee Exhibit 5, pg. 2) 40.3489126%	\$ 580,553 \$ 32 \$ 139,298 \$ 1,261,168 \$ 2,623,397 \$ 14,572,682 A18* B18 \$ 9,488,153
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 14 Smart Saver® for Non-Residential Customers - HVAC 15 Smart Saver® for Non-Residential Customers - Custom Rebate 16 Emart Energy Now 17 Total for Non-Residential Conservation Programs 18 Total DSM Programs (at 75% Avoided Cost)	533 0 155 1,586 2,716	2,724,749 380 788,310 3,964,553 21,205,380	\$ 798,480 \$ 44 \$ 191,585 \$ 1,734,583 \$ 3,608,163 \$ 20,042,949	72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% NC Non-Residential Peak Dermand Allocation Factor (McGee Exhibit 5, pg. 2) 40.3489126% NC Retail Peak Dermand	\$ 580,553 \$ 32 \$ 139,285 \$ 1,261,168 \$ 2,623,397 \$ 14,572,682
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 14 Smart Saver® for Non-Residential Customers - HVAC 15 Smart Saver® for Non-Residential Customers - Custom Rebata 16 Smart Saver® for Non-Residential Customers - Custom Rebata 17 Total for Non-Residential Conservation Programs	533 0 155 1,586 2,716 18,456	2,724,749 380 788,310 3,964,553 21,205,380	\$ 798,480 \$ 44 \$ 191,588 \$ 1,734,583 \$ 3,608,163 \$ 20,042,949 \$ 23,515,262	72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% NC Non-Basidential Peak Demand Allocation Factor (McGee Exhibit 5, pg. 2) 40.3489126% NC Retail Peak Demand Allocation Factor (McGee	\$ 580,553 \$ 32 \$ 139,298 \$ 1,261,168 \$ 2,623,397 \$ 14,572,682 A18* B18 \$ 9,488,153
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 14 Smart Saver® for Non-Residential Customers - HVAC 15 Smart Saver® for Non-Residential Customers - Custom Rebate 16 Emart Energy Now 17 Total for Non-Residential Conservation Programs 18 Total DSM Programs (at 75% Avoided Cost)	533 0 155 1,586 2,716 18,456	2,724,749 380 788,310 3,964,553 21,205,380	\$ 798,480 \$ 44 \$ 191,585 \$ 1,734,583 \$ 3,608,163 \$ 20,042,949 \$ 23,515,262 \$ 12,245,662	72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% NC Non-Basidential Peak Demand Allocation Factor (McGee Exhibit 5, pg. 2) 40.3489126% NC Retail Peak Demand Allocation Factor (McGee	\$ 580,553 \$ 32 \$ 139,298 \$ 1,261,168 \$ 2,623,397 \$ 14,572,682 A18* B18 \$ 9,488,153
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 14 Smart Saver® for Non-Residential Customers - HVAC 15 Smart Saver® for Non-Residential Customers - Custom Rebate 16 Emart Energy Now 17 Total for Non-Residential Conservation Programs 18 Total DSM Programs (at 75% Avoided Cost) Total OSM Program Breakdown	533 0 155 1,586 2,716 18,456 438,636	2,724,749 380 788,310 3,964,553 21,205,380	\$ 798,480 \$ 44 \$ 191,585 \$ 1,734,583 \$ 3,608,163 \$ 20,042,949 \$ 23,515,262 \$ 12,245,662 11,269,600	72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% NC Non-Basidential Peak Demand Allocation Factor (McGee Exhibit 5, pg. 2) 40.3489126% NC Retail Peak Demand Allocation Factor (McGee	\$ 580,553 \$ 32 \$ 139,298 \$ 1,261,168 \$ 2,623,397 \$ 14,572,682 A18* B18 \$ 9,488,153
EE Programs (at 50% Avoided Cost) 10 Smart Saver® for Non-Residential Customers Lighting 11 Smart Saver® for Non-Residential Customers Motors 12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products 14 Smart Saver® for Non-Residential Customers - HVAC 15 Smart Saver® for Non-Residential Customers - Custom Rebate 16 Smart Energy Now 17 Total for Non-Residential Conservation Programs 18 Total OSM Programs (at 75% Avoided Cost) Total OSM Program Breakdown 19 Power Manager (Residential)	533 0 155 1,586 2,716 18,456	2,724,749 380 788,310 3,964,553 21,205,380	\$ 798,480 \$ 44 \$ 191,585 \$ 1,734,583 \$ 3,608,163 \$ 20,042,949 \$ 23,515,262 \$ 12,245,662	72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% 72.7072722% NC Non-Rasidential Peak Demand Allocation Factor (McGee Enhibit 5, pg. 2) 40.3489126% NC Retail Peak Demand Allocation Factor (McGee Exhibit 5, pg.2)	\$ 580,553 \$ 32 \$ 139,285 \$ 1,261,168 \$ 2,623,397 \$

(1) Total System DSM programs allocated to Residential and Non-Residential based on contribution to retail system peak Note: Schedule may not foot due to rounding

Duff Exhibit 1 pg. 3

Duke Energy Carolinas Actuals for January 1, 2011 to December 31, 2011 Docket Number E-7, Sub 1031 Load Impacts and Avoided Cost Revenue Requirements by Program

					,		
						NC R	esidential Avoided Costs
	•		Svete	m Avoided Cost			
Residential Programs	System kW Reduction - Summer Peak	System Energy Reduction (kWh)		rus Requirement	NC kWh Sales Allocation Factor		A*B
EE Programs (at 50% Avoided Cost)					(McGee Exhibit 5, pg. 3)		<u> </u>
1 Appliance Recycling		_	5				
2 Residential Energy Assessments	1.306	9.227.946	\$	1,314,136	72.6972151%	\$	•
3 Smart Sever® for Residential Customers	39,712	367,409,449	Ś	40,319,118	72.6972151% 72.6972151%	\$	955,340
4 Low income Energy Efficiency and Weatherization Assistance	52	488,949	Š	50,792	72.6972151%	\$	29,310,87 36,92
5 Energy Efficiency Education Program for Schools	J 262	1,413,208	5	265,292	72.6972151%	Š	36,92 192,86
6 Residential Retruit Pilot	21	125,564	. \$	40,935	72.6972151%	Š	29,75
7 Home Energy Comparison Report (My Home Energy Report) 8 Total for Residential Conservation Programs		356,218	\$	30,711	72.6972151%	\$	22,32
A AMERICAN CONTROL ASSISTANCE LANGUAGE	41,419	379,022,334	\$	42,020,984		5	30,548,08
					NC Residential Peak Demand		
					Affocation Factor (McGee Exhibit 5,		
_	1				pg. 3)		A9 " 89
•	* *						
19 Total DSM Programs (at 75% Avoided Costs)	\$48,335		_				
	370,335	,	\$	30,131,132	32,2293181%	. \$	9,711,05
,	1						
•						au e	Ma
		•					Non-Residential wolded Costs
•	<u> </u>		Surtan	n Avoided Cost			
•	System kW Reduction -	System Energy		ue Requirement	NC kWh Sales Allocation Factor		A*B
Non-Residential Programs	Summer Peak	Reduction (kWh)			(McGee Exhibit 5, pg. 3)	_	
			٠				
EE Programs (at 50% Avoided Cost)							
10 Smart Saver® for Non-Residential Customera Lighting	11,329	64,190,217	\$	13,497,639	72 6972151%	\$	9,812,407
11 Smart Saver® for Non-Residential Customers Motors	1,107	5,730,908	\$	1,286,403	72.6972151%	š	935,179
12 Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) 13 Smart Saver® for Non-Residential Customers - Energy Star Food Service Products	82	503,823	\$	54,684	72.6972151%	Š	39,899
14 Smart Saver® for Non-Residential Customers - HVAC	184	1,012,402	\$	263,359	72.6972151%	\$	191,454
15 Smart Sever® for Non-Residential Customers - Custom Rebate	1,869	4,987,231	S	2,094,930	72.6972151%	\$	1,522,950
16 Smart Energy Now	6,585 1,344	55,974,704	\$	11,605,896	72.6972151%	\$	8,437,163
17 Total for Non-Residential Conservation Programs	22,500	7,159,090 139,578,375	\$	825,610 29,624,719	72 6972151%	5	600,195
•	,	233,570,375	•	29,028,719		\$	21,539,254
					NC Non-Residential Peak Demand		
					Allocation Factor (McGee Exhibit 5.		
	•				pg. 3)		A18 *B18
18 Total DSM Programs (at 75% Avoided Cost)	, 548.335		_				
i i i i i i i i i i i i i i i i i i i	346,333		<u>\$</u>	30,131,132	42.2350050%	\$	12,725,885
Ī	,						
		7					
·	Į.						
Total DSM Program Breakdown	t .				NC Retail Feak Damand Allocation		
Total DSM Program Breakdown	\ \ 				NC Retail Feek Demand Atlocation Factor (McGee Exhibit 5, pg. 3)		A21° 821
19 Power Manager (Residential)	226,935	•	s	12,470,132			A21° 821
19 Power Manager (Residential) 20 Power Share (Non-Residential)	321,400	<u> </u>		17,661,000	Factor (McGee Exhibit 5, pg. 3)		A21* 621
19 Power Manager (Residential)		:	\$	-		<u> </u>	A21° 821 22,436,943

(1) Total System DSM programs allocated to Residential and Non-Residential based on contribution to retail system peak Note: Schedule may not foot due to rounding

Duff Eichübit 1 pg. 4

Duke Energy Carolinas Actuals for Jenuary 1, 2012 to December 31, 2012 Docket Number E-7, Sub 1031 Load Impacts and Avoided Cost Revenue Regularments by Program

•					•		
ı						NC R	sidential Avoided
·	System kW - Summer	System Energy	System	n Avoided Cost	NC kWb Sales Allocation Factor		Costs A * B
B. 1.1.—Alal Danasana	Peak	Reduction (kWh)		e Requirement	* (McGee Exhibit 5, pg. 4) *	_	
Residential Programs					186	_	
EE Programs (at 50% Avoided Cost)	356	1,971,543	5	389,649		\$.	283,351
1 Appliance Recycling	1,376	9,499,733	Š	1,453,167	72.7194575%	\$	1,056,735
2 Residential Energy Assessments	24,409	224,983,046	Š	26,147,441	. 72.7194575%	\$.	19,014,277
3 Smart Saver* for Residential Customers		•	\$	•	72.7194575%	e \$	••
4 Low Income Energy Efficiency and Weatherization Assistance	1,663	8,963,453	\$	1,771,508	72.7194575%	\$	1,288,231
5 Energy Efficiency Education Program for Schools	47	283,678	\$	94,987		# \$	65,074
6 Residential Retrofit PRot	10,461	49,339,454	\$	1,428,655	72.71 94575%	<u> </u>	1,038,918
7 Home Energy Comparison Report (My Home Energy Report)	38,322	295,040,918	\$	31,285,416	a .,	- 5	22,750,585
8 Total for Residential Conservation Programs	i	4.			• • •	٠.	
' '	1			-	MC Residential Peak Demand		
	į				Allocation Factor (McGee Exhibit 5,	â	1
	ļ				pg. 4}		A9 * B9
	•	-					
	1					_	
9 Total DSM Programs (at 75% Avoided Cost)	645,443		\$	36,353,911	34.8386691%	5	12,665,291
1 (Office) Michigan (at 12) Michigan and					•		
	·						
	}			•	•	MC	Non-Residential Avoided Costs
•	į						WARRIED CORE
			Sente	m Avoided Cost			A*8
	System kW - Summer	System Energy		ue Requirement	NC kWh Sales Allocation Factor		^ •
	Peak	Reduction (kWh)			(McGee Exhibit 5, pg. 4)		
Non-Residential Programs	l I						
-	1				-		
EE Programs (at 50% Avoided Cost)	12,076	68,918,024	\$	14,946,041	72.7194575%	\$	10,862,680
O Smart Saver® for Non-Residential Customers Lighting	1,132	5,967,650	Š	1,386,295	72.7194575%	\$	1,008,106
11 Smart Sever® for Non-Residential Customers Motors			Š		72.7194575%	\$	•
12 Smart Sever® for Non-Residential Customers - Other Prescriptive (Process Equipment)	366	1,950,854	Ś	513,211	72.7194575%	\$	373,205
13 Smart Sever® for Non-Residential Customers - Energy Star Food Service Products	1.716	4,120,481	S	2,004,592	72.7194575%	\$	1,457,728
14 Smert Sever® for Non-Residential Customers - HVAC	15.371	113,380,706	Š	24,480,159	72.7194575%	\$	17,601,839
15 Smert Saver* for Non-Residential Customers - Custom Relate	775	4,127,229	Ś	488,200	72.7194575%	\$	355,016
16 Smart Energy Now	30.561	194,337,715	\$	43,330,298		\$	31,864,574
17 Total for Non-Residential Conservation Programs	1 25,000	,				•	
	•	•		rer	NC Non-Residential Peak Demand		
					Allocation Factor (McGeo Exhibit 5,	-	
·	•			•	<u>eg. 4)</u>		A18 * B18
1	:				•		
and the same and t	645,443		\$	36,353,911	39.808426%	\$	14,498,246
18 Total DSM Programs (at 75% Avoided Cost)	1				•		
	1						
	•						
	1			•	NC Retzii Peak Demand Afforation		
was a Port & Barrers on Breech down	į				Factor (McGee Exhibit 5, pg.4)		A21° B21
Total DSM Program Breakdown	268,706	•	\$	15,134,607			
19 Power Manager (Residential)	376,735	· _		21,219,303			
20 Power Share (Non-Residential)	645,443	•	\$	36,353,911	74.7197120%	\$.	27,163,537
21 Total DSM .	1, -,						

⁽¹⁾ Total System DSM programs allocated to Residential and Non-Residential based on contribution to retail system peak Note: Schedule may not foot due to rounding

Duke Energy Carolines For the Period June 1, 2009 - December 21, 2026 Deciart Number C-7, 5eth 1031 North Carolina Net Lost Revenues Summery

Vintage 1 Residential 1. Appliance Recycling 2. Residential Energy Assessments 3. Siners Saver* for Residential Customers 4. Law Income Energy Efficiency and Meastherfortion Assistance 5. Energy Efficiency Education Program for Schools 6. Recidential Retrefit Pilor 7. My Home Energy Report 8. Teal Lees Repo	2009 44.297 92.593 8,211 980	2010 (Ye) 663,511 5,073,454	2011	1 Mth 2012	2012	2013	2014 ^{td}	Tetai
1 Appliance Recycling 2 Residential Energy Assessments 3 Smert Swert for Residential Customers 4 Lew Income Energy Efficiency and Weatherlastion Ascirtance 5 Energy Efficiency Education Program for Schools 6 Residential Rutretts Pilot 7 My Home Energy Report	92.993 8,111	669,511 5,073,454						
2 Residential Energy Assessments 3 Siner Saver® for Residential Customers 4 Lew Income Energy Efficiency and Weatherburton Ascistance 5 Energy Efficiency Education Program for Schools 6 Residential Butterfit Pilot 7 Residential Energy Report	92.993 8,111	669,511 5,073,454						
2 Residential Energy Assessments 3 Siner Saver® for Residential Customers 4 Lew Income Energy Efficiency and Weatherburton Ascistance 5 Energy Efficiency Education Program for Schools 6 Residential Butterfit Pilot 7 Residential Energy Report	92.993 8,111	669,511 5,073,454			+			
3 Smart Saver® for Residential Customers 4 Law Income Energy Efficiency and Weatherborton Aschrance 5 Energy Efficiency Education Program for Schools 6 Residential Rutrett Pilot 7 My Home Energy Report	92.993 8,111	5,073,454		*,	77	į	<i>;</i>	_
4 Lew Income Energy Efficiency and Weatherlanties Ascistance 5 Energy Efficiency Education Program for Schools 6 Recisionals Authority Pilot 7 My Home Energy Report	8,111		752,157	66,386		15		1,512,3
5 Energy Efficiency Education Program for Schools 6 Recisionalsi Retrofit Price 7 My Home Energy Report			15,613,579	1,378,637		. %	8	22.150.0
6 Recidential Retroft (Not Ny Home Energy Report	380	184 626	298,617	26,374		-	~	\$17.7
7 My Home Energy Report		52,034	109,867	9,700	£**	7.8	(*	172,5
	7	•	-	•	•			
was many and	146.201			<u> </u>	<u> </u>		:	
9 Found Residential Revenues *		5,979,425	16,774,260	1,481,117	•	· · · · · · · · · · · · · · · · · · ·		24,381,3
IO Net Lost Residential Revenues	18,544	103,465 5,875,860	149,220	12,435	<u> </u>	<u> </u>	<u></u> •	283,4
,	147,447	3,4/3,860	14,625,040	1,468,683		•	•	24,097,5
Non-Residential	2009	2010	2011	1 Mth 2012	2012	2019	2014 ^ŭ	
13 Screet Saver® for Non-Residential Customers Lighting							2014	Total
2 Smart Sever® for Non-Residential Customers Moters	267,995	1,568,968	2,140,019	179,572		J(*)*	£/	4,156.55
13 Smart Sever® for Non-Residential Custamers - Other Prescriptive (Process Equipment)	1,502	34,581	47,849	4,389			•	-,138,3 88,3
14 Smart Saver® für Non-Residential Custumers - Energy Star Food Service Products	•	4	10	1	\$	AS		
15 Smart Saver® for Hen-Residential Customers - HVAC	1,873	24,316	31,396	2,792	÷	2.		60.33
16 Smart Sever® for Nem-Residential Customers - Conton Relate	4,441	61,038	114,704	10,212	•:			150.31
7 Smart Energy How	170	129,797	423,378	38,673	19		•1	\$92.01
LE Total Lost Benerius			<u> </u>	<u>·</u>				332,0,
9 Found Non-Residential Revenues*	275,987	1,818,705	2,757,354	235,639			·	5,007,60
Met Last Non-Residential Revenues	196,302	1,171,619	1.521,460	135,122				3,124,50
	78,683	647,086	1,135,494	100,517			 -	1,963,18
Vintage 2	2009	2010	2011	Year 1 Msh 2012	1 and Year 2 2012	2013	2014 ⁶⁴⁾	
Residential ·							1014	Total
	Ī							
1 Appliance Recycling	. - S	1. 47		25	****			
2 Residential Energy Assessments					27.	*	150	959
3 Smart Smer* for Besidential Customers	1 to 21 21 1 to 2	7	199,106	:•	416,412	· .	472	615,52
4 Law Income Energy Efficiency and Westherlastian Assistance	13.	• • •	7,082,988	. -	17,639,492	•	525	24,722 47
5 Energy Efficiency Education Program for Schools	74	240	8,604	×.	25,327	*	. • 3	73.93
S Residential Retruft Phys	1.		26,045		54,110	21	•5	82.15
7 My Home Energy Report		,	623		6,599		17	7,42
2 Total Last Revenues			7,317,565					
9 Found Residential Revenues *	1 8	0.0	46 409		18,143,946	-	· ·	25 441.51
O Net Last Replatential Revenues	7.5		7,272,156		91,169			137.571
· · · · · · · · · · · · · · · · · · ·			,		14,024,77	•	•,	25,323,531
		2010	2011	1 Mth 2012	7012	2013	2014	Tetal
Non-Residential	2009	1910						
Senant Sever® for Non-Busideential Customers Lighting	2009	2010	1,000,289	•	2.178 947	2		
Senant Sever [®] for Non-Residential Customers Lighting Senant Sever [®] for Nan-Residential Customers Messary			1,000,289 42,267	: :	2,128,947 92,407	÷.		
I. Smart Saver® for Non-Residential Customers Lighting Smart Saver® for Non-Residential Customers Nations Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Saulaurent)				#: * 2.	92,407	24	₹ •	134,674
Senant Saver® for Non-Residential Customers Lighting Senant Saver® for Non-Residential Customers Mexans Senant Saver® for Non-Residential Customers - Other Prescriptive (Process Equipment) Senant Saver® for Non-Residential Customers - Centry Star Feed Savete Products		•	42,267	#2 # 15 61	92,407 ¹ 16,682	24		334,67- 23,28
Smart Saver* for Non-Residential Customers Lighting Smart Saver* for Non-Residential Customers Masors Smart Saver* for Non-Residential Customers - Other Prescriptive (Process Equipment) Smart Saver* for Non-Residential Customers - Changy Star Food Service Produces Smart Saver* for Non-Residential Customers - Princip Star Food Service Produces Smart Saver* for Non-Residential Customers - NYAC			42,267 6,600	#2 # 12 #4 #4	92,407 16,682 33,354	<u>.</u>	₹ •	334,67- 23,28: 47,66:
Smart Saver® for Non-Residential Customers Lighting Smart Saver® for Non-Residential Customers Mesters Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Squipment) Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Squipment) Smart Saver® for Non-Residential Customers - Prescriptive (Process Squipment) Smart Saver® for Non-Residential Customers - Custom Rebete Savert Saver® for Non-Residential Customers - Custom Rebete		•	42,267 6,600 14,315	* 2. •	92,407 16,682 13,354 151,187	j	7* 15 	334,674 23,283 47,669 204,534
Smart Saver* for Non-Residential Customers Lighting Smart Saver* for Non-Residential Customers Heaters Smart Saver* for Non-Residential Customers - Other Prescriptive (Precess Zquipment) Smart Saver* for Non-Residential Customers - Energy Star Food Service Produces Smart Saver* for Non-Residential Customers - HYAC Smart Saver* for Non-Residential Customers - HYAC Smart Saver* for Non-Residential Customers - Custom Relate Smart Saver* Non-Residential Customers			42,267 6,600 14,315 53,349 595,732	# * * * * * * * * * * * * * * * * * * *	92,407 16,682 33,354 151,187 1,414,842		1 to	334,674 23,283 47,665 204,534 2,010,574
1. Smart Saver* for Non-Residential Customers Lighting 2. Smart Saver* fee Non-Residential Customers Masons 3. Smart Saver* fee Non-Residential Customers - Other Prescriptive (Process Equipment) 5. Smart Saver* fee Non-Residential Customers - Changy Star Food Service Produces 5. Smart Saver* fee Non-Residential Customers - Prescriptive 5. Smart Saver* fee Non-Residential Customers - NVAC 5. Smart Saver* fee Non-Residential Customers - Custom Reliets 5. Smart Saver* 6. Food Saver Saver* 7. Total Lost Revurses			42,267 6,600 14,315 53,349	* 2. •	92,407 16,682 33,354 151,187 1,414,842 301.017		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	334,674 23,282 47,665 304,536 2,010,574 345,547
Senant Saver® for Non-Residential Customers Lighting Smart Saver® for Non-Residential Customers Meaters Smart Saver® for Non-Residential Customers - Other Prescriptive (Process Squipment) Smart Saver® for Non-Residential Customers - Chargy Star Food Service Produces Smart Saver® for Non-Residential Customers - Prince Food Service Produces Smart Saver® for Non-Residential Customers - Custom Rebote Smart Energy Nov Total Lost Revenues Found Hon-Residential Revenues*	year year and a	3 · · · · · · · · · · · · · · · · · · ·	42,267 6,600 14,315 53,349 595,752 44,531	* * *	92,407 16,682 33,354 151,187 1,414,842 301,017 4,138,435		1 to	3,329,236 334,674 29,282 47,669 304,536 2,010,574 345,547 5,895,518
Pron-Residential Senant Saver® for Non-Residential Customers Lighting Senant Saver® for Non-Residential Customers Habiters Senant Saver® for Non-Residential Customers - Other Prescriptive (Precess Equipment) Senant Saver® for Non-Residential Customers - Diber Prescriptive (Precess Equipment) Senant Saver® for Non-Residential Customers - Every Star Food Service Preduces Senant Serve® for Non-Residential Customers - HVAC Senant Serve® for Non-Residential Customers - Custom Rebote Senant Serve® for Non-Residential Customers Senant Serve® Non-Residential Revenues Found Form Residential Revenues Proced Form Residential Revenues Not Leet Residential Revenues	year year and a	3 · · · · · · · · · · · · · · · · · · ·	42,267 6,600 14,315 53,349 595,782 44,531 1,757,084	* * *	92,407 16,682 33,354 151,187 1,414,842 301.017		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	234,67 23,78 47,66 204,53 2,010,57 345,54

	1			Year 1 an	d Year 3 Extimate			
Vintage 6 (b)	2009	2010	2011	1 Mth 2012	2012	2013	2014	Total
	1							
esidential	- !					_	61.685	81.1
autiance Recycling	* •	•		•	19,490	r.	129,507	349.6
exidential Energy Assessments		•	•	• .	240,137			9,578,9
mart Saver® for Residential Customers		-	•	• `	6,958,759		2,720,149	
over Income Energy Efficiency and Weatherlantion Assistance	-	•	•	•	·	-		:
nergy Efficiency Education Program for Schools			•	•	235,193		94,189.	17.5
ecidential Retrafti Pilot	1 .	•	•	•	10.919	••	6,922	1,523.4
one Energy Comparison Report	•	•			1,523,842			12,004,7
oral Lost Revenue	-1	•	•	•	8,968,341	i.	3,016,452	36,1
mand Residential Revenues *		<u> </u>	<u>-</u>		30,231		5,880 \$.010,573	11,944.0
let Lost Residential Revenues	- F2	-	•	3.4	6,958,110	4.7		17,500,0
THE COLUMN TWO IS NOT THE PARTY OF THE PARTY	1	4,			1	17	5° →	
	2009	2010	2011	1 Mth 2012	2012	2013	2014	Tere
on-Residential					S#17.		2 1 705 725	1.684.9
mart Sever for Non-Residential Contomers Lighting			•	•	→ 959,271		703,259	
mert Saver® for Non-Residential Customers Motors	i -	•	•.		, 64,385	·	79,544	144,
mart Saver* for Non-Residential Customers - Other Prescriptive (Presess Equipment)	i -	• '	•					
mert Sever" for Non-Residential Customers - Energy Star Food Service Products			;		14,096		22,927	37,
ment Sever* for New-Residential Customers - HYAC		-			70,330 -	∂. ["	53,123	123
mart Saver* for Non-Residential Customers - Custom Rebits	· .	•	•	•	1,650,967	-	1.451,488	1,102,
	٠.		·		184,623	•		184,
ment Energy New		-	•		2,943,672	•	2,312,452	5,254,
geni Leat Revenuel	!			٠.	445,448	•:	126,076	572,
found from-Residential Exvenues * Net Lost Non-Gasidential Renumes		- :			2,497,224 ar 2 Estimate		2,106,175	4,641.5
	2009	2010	2011	Ye 1 Mile 2012	2,497,224	2013	2,106,875 2014	4,643.
Net Lost Non-Basidential Assenses Vinings 4	1009	2010	2011		2,497,224 ar 2 Estimate	2013		·
iet Lort Non-Rasidential Revenues Vinènge 4	2009	2010	2011	1 MRH 2012	2,497,224 ar 2 Estimate		2014 1	Total
vintage 4	2009	2010	2011	1 MRH 2012	2,497,224 ar 2 Estimate 2012	2013	2014 ⁻¹	Total
Net Lost Non-Basidential Revenues Vinizage 4 Residential Appliance Recycling	-	2010	2011		2,497,224 ar 2 Estimate	 	2014**. 796,583 165,736	Total 796.
Vintage 4 Residential Applience Recycling Residential Energy Assessments		2010	2011	1 MRH 2012	2.497,224 ar 2 Estimate 2012		2014 ⁻¹¹ . 796,583 185,736 2,009,316	786 786 163, 2,009
Vincage 4 Vincage 4 Residential Appliance Recycling Residential Energy Assessments Residential Energy Assessments		2010	2011	1 MRH 2012	2,497,224 ar 2 Estimate 2012	 	796,583 165,736 2.009,316 494,207	796 2,009 494
Vintage 4 Residential Appliance Recycling Residential Energy Assessments Incini Source Ten Residential Customan Low Income Recycling Residential Energy Assessments From Source Ten Residential Customan Low Income Energy (Titlemory and Westbertstation Assistance		2010	2011	1 MRH 2012	2.497,224 ar 2 Estimate 2012	 	796,583 165,736 2,009,316 494,207 210,100	796 2,009 494
Vinciage 4 Residential Appliance Recycling Residential Energy Assessments Reministered Foreign Assessmen	#10 #12/ 4 * 7	2010	2011	1 MRH 2012	2.497,224 ar 2 Estimate 2012	 	796,583 165,736 2.009,316 494,207	796 2,009 494
Vincage 4 Residential Appliance Recycling Residential Energy Assessments Invalidated Energy En	#10 #127 #147 #147		2011	1 MAN 2012	2,497,224 ar 2 Estimate 2012	 	796.583 165,736 2.009,316 494.207 210,100	796 165 2,009 494 230
Vintage 4 Residential Appliance Recycling Residential Energy Assessments Scienti Sever for Residential Outcomen Exercise Compy Officiency and Westbertsation Assistance Energy Efficiency Education Program for Scisools Residential Retwolf Plots Residential Retwolf Plots			2011	1 MRH 2012	2.497,224 ar 2 Estimate 2012	 	796,583 165,736 2.009,316 494,207 216,100	796. 165. 2,009. 494. 210.
Vinciage 4 Residential República Recycling Residential Emergy Assessments Residential Emergy Assessments Remain Sensor for Residential Outstands Emergy Efficiency and Westhertsation Assistance Emergy Efficiency Education Program for Schools Residential Retwell Pilot Hoome Energy Companison Report Total Leaf Revenues	#27 4.77 5.27 5.47 5.47		2011	1 MAN 2012	2,497,224 av 2 Estimate 2012	 	796,583 185,736 2,009,316 494,207 210,100 3,675,941 49,228	7868 163 2,009 494 210 3,675 45
Viniçage 4 tesidenti si tesidenti si tesidenti si tesidenti si tesidenti si tesidenti si	22.0 22.0 22.0 (c-1)	2.45 0.45 0.45 0.45	2011	1 MAN 2012	2,497,224 ar 2 Estimate 2012	 	796,583 165,736 2.009,316 494,207 216,100	7868 163 2,009 494 210 3,675 45
Vinicage 4 tesidenti si upsience Recycling tesidenti si upsience Recycling tesidenti si upsience Recycling tesidenti si upsience Recycling tesidenti si upsience County Assessments own Income County Officiency and Westbertradien Acyletance margy tifficiency taleutien Program for Schools tesidential Recycling tesidential Recycling tesidential Recycling tesidential Recyclings	20 20 20 20 20			1 MNA 2012	2,497,224 av 2 Estimate 2012		796,583 185,736 2,009,316 494,207 210,100 3,675,941 49,228 3,680,713	7904 2100 3,625 45 3,636
Vinces 4 tesidenti si legidence Recycling tesidenti si Recycling		2.45 0.45 0.45 0.45	0.00	1 MAN 2012	2,497,224 av 2 Estimate 2012	 	796,583 165,736 2,009,316 494,207 210,100 3,675,941 45,228 3,680,713	796 163 2,009 494 230 3,675 45 3,636 Total
Vintage 4 Residential Applience Recycling Residential Energy Assessments Formal Searce For Residential Customers Low Income Evergy Education Program for Schools Residential Reverses Policiency and Westbertzselen Assistance Energy Efficiency Education Program for Schools Residential Review Hint Home Energy Comparison Report Total Leaf Revenues Found Residential Revenues Rest Leaf Residential Revenues	2009			1 Mth 2012	2,497,224 av 2 Estimate 2012		796,583 185,736 2,009,316 494,207 210,100 3,675,941 45,228 3,630,713 2014 ³⁶	796. 163, 2,009, 494, 210, 3,636 3,636 Total
Vinitage 4 Testidential Testidential Testidential Testidential Testidential Testidential Testidential Testidential Testidential Testiden	2009	2010		1 Mth 2012	2,497,224 av 2 Estimate 2012		796,583 165,726 2,009,316 494 207 210,100 3,675,941 45,228 8,480,713 2014 ³⁴ 1,525,004 138,374	7664 786 103, 2,009, 494, 230, 3,675, 45, 3,630, Total
Vinings 4 Residential Appliance Recycling Residential Contents of Residential Residential Contents of Residential Residential Contents of Residential	2009	2010	2011	1 Mth 2012	2,497,224 av 2 Estimate 2012		796,543 165,736 2.009,316 494,207 210,100 3,675,941 45,228 3,630,713 2014 ³⁴ 1,525,004 138,574 621	7964 796, 165, 2,009, 494, 210, 3,675, 45, 3,630 Total
Vinitage 4 Residential República Recycling Residential República Recycling Residential Residential Recycling Residential Revenues Revenues R	2009	2010	2011	1 Mth 2012	2,497,224 av 2 Estimate 2012		796,583 165,736 2,009,316 494 207 210,100 3,675,941 45,228 8,880,713 2014 ³⁴ 1,575,004 138,574 621 18,559	786 163 2,009 494 210 3,675 45 3,636 Total 1,521 134
Vinitage 4 Residential Appliance Recycling Residential Chargy Assessments Residential Chargy Assessments Secure for Residential Outcomers Residential Recycling (Rickery and Westhertsation Assistance Energy Efficiency Education Program for Schools Residential Recycling (Rickery and Westhertsation Assistance Energy Efficiency Education Program for Schools Residential Recycling (Rickery Education Report Testal Least Recycling Forum Residential Recyclings Frest Least Residential Revenues * Rect Least Revenues Rect Residential Revenues * Rect Least Revenues Rect Rect Residential Revenues * Rect Least Revenues Rect Rect Residential Revenues * Rect Least Revenues Rect Rect Residential Revenues Rect Rect Rect Rect Rect Rect Rect Rect	2009	2010	2011	1 Mth 2012	2,497,224 av 2 Estimate 2012		796,583 165,736 2,009,316 494,207 210,100 3,675,941 43,228 8,850,713 2014 ⁵⁴ 1,575,004 138,374 621 18,559 130,039	796 163 2,009 494 230 3,640 Total 1.521 134 135 135 135 135 135 135 135 135 135 135
Vintage 4 Residential Applience Recycling Revenues Residential Energy Assessments Residential Energy Residential Customers Record Recycling Residential Energy Residential Customers Recycling Residential Customers Recycling Residential Recycling Residential Recycling Residential Recycling Residential Recycling Residential Recycling Residential Revenues Found Residential Revenues Found Residential Revenues Found Residential Revenues Non-Residential Revenues Non-Residential Revenues Smart Sever® for Non-Residential Customers Lighting Smart Sever® for Non-Residential Customers - Other Presidential Civiling Smart Sever® for Non-Residential Customers - Other Presidential Civiling Smart Sever® for Residential Customers - Energy Star Peed Sarvice Predicts Smart Sever® for Residential Customers - Energy Star Peed Sarvice Predicts Smart Sever® for Non-Residential Customers - Hother Severy Star Peed Sarvice Predicts Smart Sever® for Non-Residential Customers - Hother Severy Star Peed Sarvice Predicts Smart Sever® for Non-Residential Customers - Hother Severy Star Peed Sarvice Predicts	2009	2010	2011	1 Mth 2012	2,497,224 av 2 Estimate 2012		796,583 165,736 2,009,316 494 207 210,100 3,675,941 45,228 8,880,713 2014 ³⁴ 1,575,004 138,574 621 18,559	796 163 2,009 494 230 3,640 Total 1.521 134 135 135 135 135 135 135 135 135 135 135
Vinitage 4 Residential Appliance Recycling Residential Revenues Residential Energy Assessments Secure Secure Residential Customers Low Income Secure Records Customers Low Income Secure Residential Customers Low Income Centry efficiency and Westbertsaden Assistance Energy Efficiency and Westbertsaden Assistance Energy Efficiency and Westbertsaden Assistance Energy Comparison Report Total Leaf Revenues Found Residential Revenues Found Residential Revenues Near Basel Revenues Non-Residential Revenues Non-Residential Revenues Smart Sever for Non-Residential Customers Melous Smart Sever for Non-Residential Customers - Charles Presidential Process Episement) Smart Sever for Non-Residential Customers - Energy Star Pead Sanvice Products Smart Sever for Non-Residential Customers - Energy Star Pead Sanvice Products Smart Sever for Non-Residential Customers - Custom Rebeits	2009	2010	2011	1 Mth 2012	2,497,224 av 2 Estimate 2012		796,583 165,796 2.009,516 494 207 210,100 3,675,941 45,228 1,820,713 2014 ¹⁶ 1,525,004 138,574 621 18,850 130,039 2,142,598	796. 103, 2,009, 494, 230, 230, 3,675, 45, 3,630 Total 1,525, 138, 130, 2,141, 141, 152, 152, 152, 152, 152, 152, 152, 15
Vinings 4 Residential Appliance Recycling Residential Energy Assessments Smart Sover* for Residential Outcomers Low Income County Officiency and Weathertesten Assistance Energy Efficiency Education Program for Schools Residential Revents Prior Home Energy Comparison Report Total Last Revenues Found Residential Revenues Found Residential Revenues Nou-Residential Smart Sever* for Non-Residential Customers Lighting Senant Sever* for Non-Residential Customers Melans Senant Sever* for Non-Residential Customers - Other Prescriptive (Process Epstement) Smart Sever* for Non-Residential Customers - Energy Star Pead Service Preducts Smart Sever* for Non-Residential Customers - Hother Smart Sever* for Non-Residential Customers - Hother Smart Sever* for Non-Residential Customers - HVAC Senant Sever* for Non-Residential Customers - Custom Rebets Senant Sever* for Non-Residential Customers - Customer Rebets Senant Sever* for Non-Residential Customers - Customers	2009	2010	2011	1 Mth 2012	2,497,224 av 2 Estimate 2012		2014**. 796,583 165,736 2,009,316 494 207 210,100 3,675,941 43,228 1,830,713 2014** 132,574 621 18,159 130,039 2,142,558 3,955,195	790. 790. 165, 2,009, 494, 230, 230, 3,675, 45, 3,630, Total 1,525, 138, 180, 2,142, 3,955
Vinitage 4 Residential Appliance Recycling Residential Energy Assessments Residential Energy Assessments Residential Energy Assessments Energy Efficiency and Weathertsacken Acalicance Energy Efficiency Education Program for Schools Residential Revents Plot Nome Energy Comparison Report Total Lost Revenues Found Includential Invenues Found Includential Invenues Non-Residential Invenues Non-Residential Revenues Non-Residential Revenues Non-Residential Revenues Non-Residential Energy State Pool Service Senant Severy for Non-Residential Customers - Other Prescriptive (Process Espierment) Smart Severy for Non-Residential Customers - Other Prescriptive (Process Espierment) Smart Severy for Non-Residential Customers - Energy Star Pool Service Products Smart Severy for Non-Residential Customers - Energy Star Pool Service Products Smart Severy for Non-Residential Customers - Energy Star Pool Service Products Smart Severy for Non-Residential Customers - Custom Redeta	2009	2010	2011	1 Mth 2012	2,497,224 av 2 Estimate 2012		796,583 165,796 2.009,516 494 207 210,100 3,675,941 45,228 1,820,713 2014 ¹⁶ 1,525,004 138,574 621 18,850 130,039 2,142,598	796 798 163, 2,009, 494, 210, 3,675, 45, 3,630,

^{*} Found Revenues - see Duff Exhibit 4

(a) Estimated Lief Revenues were estimated by affecting estimated system Lost Reve (b) Vintage 3 Lost Revenues were based on Perticipants during July - December 2012

Dukė Energy Carolinas For the Period June 1, 2009 - December 31, 2012 Docket Number E-7 Sub 1031 **Actual Program Costs Including Overhead**

	Carolinas System Costs 6/1/2009 - 12/31/2009	Carolinas System Costs - 12 Months Ended 12/31/2010	Carolinas System Costs - 12 Months Ended 12/31/2011	Carolinas System Costs - 12 Months Ended 12/31/2012	Carolinas System Estimated Costs - 12 Months Ended 12/31/2013
Residential Energy Assessments Residential Home Retrofit Residential Neighborhood Program	2,012,300	2,501,875 123,262	2,683,722 119,486	2,820,270 158,086	2,273,277
Home Energy Comparison Report Residential Smart Saver Appliance Recycle Program	2,651,125	26,088,102	23,136,717	110,485 3,026,124 19,587,897 303,920	9,646,374 17,599,484
Low Income Services Energy Efficiency Education Nonresidential Energy Assessments	106,999 2,147,159 162,538	398,449 2,283,886 1,115,776	1,304 796,090 2,533,693	20,256 2,906,659 1,473,459	3,106,761 7,414,484 2,099,554 1,804,438
Nonresidential Smart Energy Now Nonresidential Smart Saver Power Manager Power Share	1,839,260 2,333,129 762,569	7,019,303 9,463,992 8,024,339	2,081,419 12,214,462 14,473,943	1,066,811 19,068,455 12,596,325	1,415,100 19,485,361 15,995,608
Total Energy Efficiency & Demand Side Program Costs	12,015,079	57,018,984	13,872,741 71,913,577	15,462,796 78,601,543	20,390,106

Duke Energy Carolinas June 2009 - December 2012 Actuals January 2013-December 2013 Estimates Docket Number E-7 Sub 1031 North Carolina Found Revenues

_			**************************************	er a a ser vise i da de	T. a.u. Estimate	A MUU TOWN	
	2.7 42.35 (Co. 2.5.45)	Actual/Repor	ted KWH 2011	2812	2013		·
l	ድ <i>୍ (</i> -2009 አላሪታ	2010 Sept	244 ZUIT334-	2012	- 45. E013 - 4-46		Box 6 - include
1 Boilers (unmetered)	\$75, 99 0	•	• :			_	Box 6 - Include
2 Bailers (metered) '		-	117.082.542	416,539,426	_		Box 5 - exclude
3 Economic Development	93,990,900	104,307,244	117,082,342 8,246	218,311	238,696	238,696	Box 3 - exclude
4 Plug-in Electric Charging Station Pilot		-	723,338	1,204,245	464,224	458,169	Box 6 - include
5 Food Service	693,553	949,022	7.23,336 2.973,046	1,002,303	949,906	990,616	Box 6 - include
6 Process Heat	31,014	1,783,740	2,373,040	1,002,303	343,300		
7 Lighting			162,984	76,420	76.420	76,420	Box 6 - include
8 Residential	102,492	169,991	129,669	77,433	93,289	93,289	Box 6 - include
9 Non Residential (Regulated)	112,286	175,553	2,146	,,,433	35,253	•	Bax 6 - include
10 Non Residential (Non Regulated)	3,630	3,630	121,081,971	419,118,139	1,822,536	1,857,191	
11 Total KWH .	95,509,866	107,389,180	121,081,971	419,110,155	1,022,330	2,007,252	
			2 224 452	2 200 401	1,583,839	1,618,494	•
12 Total KWH Included	1,518,966	3,081,936	3,991,183	2,360,401	1,363,633	1,020,434	
					1 245 252	1 275 720	. 15
13 Total KWH Included (net of Free Riders 15%)	1,291,121	2,619,645	3,392,506	2,006,341	1,346,263	1,375,720	
			· · · · · ·		 		1
14 Annualized Found Revenue - Non Residential	\$ 509,839		\$ 1,375,791		\$ 640,232	\$ 654,950	r *
15 Annualized Found Revenue - Residential	\$ 55,308	\$ 93,912	\$ - 4 91,169	5 45,228	\$ 45,228	5 45,228] =-
25 Printed		= -		. • •		κ	,
	<u> </u>		· ·	<u> </u>	1 12.0		1
	2009	2010	2011	2012	2013	2014	
			•	<u> </u>	•	ų.	
16 Vintage 1 - 2009 - Non Res	\$ 195,302	509,839			ــــــــــــــــــــــــــــــــــــــ	1	
17 Vintage 1 -2010 - Non Res		\$ 661,779			449,841	21000	2:-
18 Vintage 2011 - Non Res			\$ 403,491		17.		1
19 Vintage 2012 - Non Res			Ť	\$ 446,448		969,817	1
20 Vintage 2013 - Non Res			•		\$ 346,792	640,232	
21 Vintage 2014 - Non Res			. ,			354,765	
22 Vintage 2015 - Non Res			İ				
23 Vintage 2016 - Non Res							
24 Vintage 2017 - Non Res	· .		i		. i.a i.a 		t
25 Rate Case Adjustment - Non Res	3				1,004,724		
Subtotal - Non Res	\$ 196,302	\$ 1,171,619	\$ 2,024,951	\$ 1,957,361	\$ 2,137,517	\$ 1,121,073	
26			J	1 20 20 20	71		
27 Vintage 1 -2009 - Residential	5 18,544					1	
28 Vintage 1 - 2010 - Residential		\$ 48,357			45,556		3
29 Vintage 2011 - Res A 27		٠,	\$ 46,409		4 4 4	Wart has been	
30 Vintage 2012 - Res	•			\$ 30,231	\$ 24,499		
31 Vintage 2013 - Res			İ		\$ 24,433	24,499	
32 Vintage 2014 - Res				÷		2-,-55	
33 Vintage 2015 - Res				w *			
34 Vintage 2016 - Res			;				2010
35 Vintage 2017 - Res			1	F 1116 243	(78,185	12 (94 104	7
Rate Case Adjustment - Residenital	<u></u> _				\$ 128,267		
36 Subtotal - Residential	\$ 18,54	\$ 103,664	\$ 195,629	3 , 133,83;	140,497	J 53,007	
		. [4	1 4 2 22 55	\$ 2,091,19	1 2 2 26 704	I C 1 196 679	ח
Total Found Revenues.	\$ 214,84	6 \$ 1,275,28	2,220,580	n 13 Tharfla	2,203,78	1,130,073	뉘

^{*} Removes amounts to be recovered in base rates.

Duke Energy Carolinas System Event Based Demand Response January 1, 2012 - December 31, 2012 Docket Number E-7 Sub 1031

	Date	State	Program Name	Event Trigger	High Temperature	Customers Notified	Customers Enrolled	MW Reduction
. –	6/29/2012 N	NC and SC	Power Manager	High Prices	103	N/A	172,232	152.1
	7/9/2012	NC and SC	Power Manager	High Prices	94	N/A	172,232	113.4
	7/17/2012	NC and SC	Power Manager	High Prices	93	N/A	171,531	141.5
	7/26/2012	NC and SC	Power Manager	High Prices	· 95	N/A	171,531	142.9
	7/27/2012 1	NC and SC	Power Manager	High Prices	95	N/A	171,531	152.1
	7/27/2012 1	NC and SC	PowerShare CallOption	High Prices	95	1	1	0.2

Note:

A loss adjustment has been included in the MW values.

The high temperature is the average of the high temperatures from 3 weather stations.

The values for MW reduction are based on the average across the hours of the event.

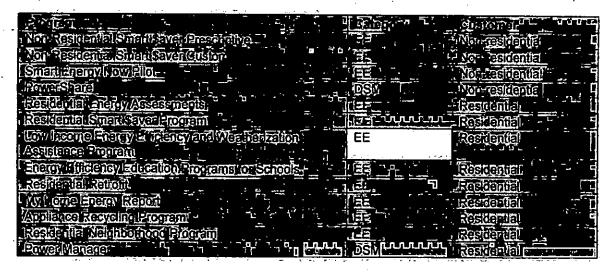
Customers Notified is the number of participants notified that they should participate or have the opportunity to participate in the event.

For Power Manager events, the Customer Enrolled value represents the load control devices activated for the event.

A. Description

During the 2013 first quarter Duke Energy Carolinas. Collaborative meeting, Duke Energy Carolinas, LLC (the "Company") will provide an update on the performance of its energy efficiency and demand side management programs for 2012, Vintage 3. 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 the Company performed in regards to the demand side management performance in Vintage 3. Pilot/program details are in the individual reports.

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 results for Vintage 3. The Company has included nominal avoided cost rather than present value of the avoided cost because our targets for save-a-watt purposes are based on nominal dollars. Please note that because North Carolina and South Carolina have slightly different avoided costs rates, the targets for each are different:

The Company has not included the number of participants from the filing as well as the percentage of target for participants in these reports. The reason for this is because participants from individual measures can represent, for example, one CFL bulb in one measure or one 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.

In 2012, the Company's achievements are above the avoided cost target for Vintage 3. This is primarily due to high impacts in the energy efficiency programs – Residential Smart \$aver and Non-Residential Smart \$aver. Although the avoided cost is higher than target, the program cost is lower than filed at a system level.

North Carolina System Summary ³			
	Vintage 3	Vintage 3	% of
5 in millions	As Filed	December 31, 2012	Target
Nominal Avoided Cost	\$210.8	\$254.0	121%
Program Cost ²	\$79.0	\$78.6	100%
MW from Vintage 3 ³	655	710	108%
Incremental EE MW from Vintage 2 ³	38	64	158%
Incremental EE MW from Vintage 13	43 .	59	149%
Total MW Achieved	736	\$34	113%
MWH	381,914	493,508	129%
Units		7,046,725	

Notes on Tables:

- 1) Numbers rounded.
- 2) As filed program costs do not include M&V. Actual costs may include M&V.
- 3) As filed MW are annual maximum peak. We track coincident peak for impacts-
- 4) Per the original SAW fillings: Vintage 3 MW targets include MW achieved from
- Vintage 1 and Vintage 2 conservation programs.

South Carolina System Summary ¹			
	Vintage 3	Vintage 3	% of
S in millions	As Filed	December 31, 2012	Target
Nominal Avoided Cost	\$241.9	\$252.1	104%
Program Cost ²	\$91.1	\$78.6	86%
MW from Vintage 3 ³	815	710	87%
Incremental EE MW from Vintage 2 ³	43	64	150X
Incremental EE MW from Vintage 13	37	59	159%
Total MW Achieved	895	834	93%
MWH	385,959	493,506	128%
Units		7,219,230	: •

Notes on Tables:

- 1) Numbers rounded.
- 2) As filed program costs do not include M&V. Actual costs may include M&V.
- 3) As filed MW are annual maximum peak. We track coincident peak for impacts.
- 4) Per the original SAW filings, Vintage 3 MW targets include MW achieved from
- Vintage 1 and Vintage 2 conservation programs. Vintage 1 in South Carolina covered February 2010 to December 2010.

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 non-residential and residential portfolios have exceeded expectations to date. This is a result of a higher take rate for CFLs offerings than originally projected.

The DSM portfolio is divided between the PowerShare (non-residential) and Power Manager (residential) programs: The Company is above target in North Carolina and slightly below target in South Carolina for avoided cost kW. Program costs are aligned comparison to achieved avoided cost for both North Carolina and South Carolina.

Carolinas Conservation Summary ¹	•		
	Vintage 3	Vintage 3	% of
\$ in millions	As Filed	YTD Dec 31, 2012	Target
North Carolina Nominal Avoided Cost	_ \$166.9	\$205.6	123%
South Carolina Nominal Avoided Cost	\$180.4	\$197.8	110%
Program Cost ²	\$56.3	\$49.9	89%
MW ³	72.2	69.8	97%
MWH	385,959.4	493,505.9	128%
Units ?		7,032,969	

Notes on Table:

1) Numbers rounded. As filed impacts and program costs are from the South Carolina MSAW settlement. North Carolina as filed for program costs, MW and MWH are 56.8M, 70.4 MW and 381,914.2 MWH.

2) As filed program costs do not include M&V. Actual costs may include M&V.

Actual program costs include amounts for Neighborhood Low Income and Appliance Recycle.

3) As filed MW are annual maximum peak. We track coincident peak for impacts...

Note: The EE portfolio kWh targets and DSM portfolio kW targets for North Carolina and South Carolina are different. 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 four-year avoided cost, with South Carolina having a higher percentage due to the higher kW target.

North Carolina Demand Response Sur	nmary ¹		· · · ·
\$ in million	Vintage 3 s . As Filed	Vintage 3 December 31, 2012	% of Target
Nominal Avolded Cost	\$43.9	\$48.5	110%
Program Cost ²	\$22.2	\$28.7	130%
MW ³	585.1	640.7	110%
MWH	N/A	N/A	
Units		186,261	

Notes on Tables:

- 1) Numbers rounded.
- 2) As filed program costs do not include M&V. Actual costs may include M&V.
- MW capability derived by taking average over PowerShare and PowerManager contract period.

South Carolina Demand Re	esponse Summan	y¹		• •.
	<u>S in millions</u>	Vintage 3 As Filed	Vintage 3 December 31, 2012	% of Target
Nominal Avoided Cost		\$61.5	\$54.3	88%
Program Cost ²		\$34.8	\$28.7	83%
ww,		743.2	640.7	86%
MWH	4 1 1 1 1	N/A	N/A	
Units			186.261	

Notes on Tables:

- 1) Numbers rounded.
- 2) As filed program costs do not include M&V. Actual costs may include M&V.
- 3) MW capability derived by taking average over PowerShare and PowerManager contract period.

D. Qualitative Analysis

Highlights

Energy Efficiency

To date, customer participation has been driven primarily by lighting and assessments programs. 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 continues to achieve 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 allow customers to request CFLs via the IVR/Web channel. These channels are lower in cost, provide an improved customer experience, and allow the Company to recognize participation in a timelier manner.

The Non-Residential Smart \$aver Custom program has achieved greater than expected participation. The established trade ally 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)

The capacity for both the PowerShare and Power Manager is above target for North Carolina but slightly below target for South Carolina.

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, Residential Energy Assessments and Energy Efficiency Education Programs for Schools. Potential program changes to improve program performance are addressed in the individual 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 reports.

F. Evaluation, Measurement and Verification

Located in individual program reports:

A. Description

The Non-Residential Smart \$aver® Prescriptive Program ("Program") provides incentives to Duke Energy Carolinas, LLC's (the "Company") commercial and industrial customers to install high efficiency equipment in applications involving new construction and retrofits and to replace failed equipment. Incentives are provided based on the Company's cost effectiveness modeling to assure cost effectiveness over the life of the measure.

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

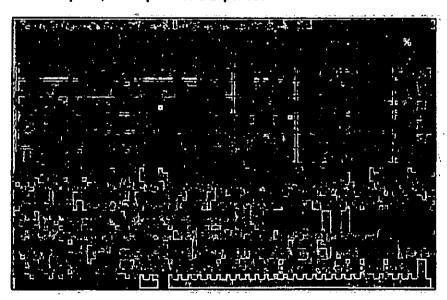
The Program promotes prescriptive incentives for the following technologies – lighting, HVAC, motors, pumps, variable frequency drives, food services and process equipment. Equipment and incentives are predefined based on current market assumptions and engineering analysis. The eligible measures, incentives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

Prior to 2013, the Company contracted with Wisconsin Energy Conservation Corporation ("WECC") to administer the fulfillment responsibilities of the Program and to provide training and technical support to the Company's trade ally network. Beginning January 2013, Ecova replaced WECC and retains responsibility for fulfillment activities and Trade Ally outreach and support as well as call center services. Prior to Ecova assuming responsibility, CustomerLink provided call center services to customers who called the Program's toll free number which is specific to the Smart \$aver® Prescriptive Program.

Audience

All of the Company's non-residential electric customers, except those that choose to opt out of the Program, are eligible.

B & C.-Impacts, Participants and Expenses



Consistent with other state programs, High Bays, occupancy sensors, compact fluorescent lighting, LED Case Lighting and T12 conversions provided a significant portion of impacts and participation during 2012, Lighting installations have a shorter payback period than most other technologies, making lighting financially more attractive for customers to pursue. Subsequent to lighting, variable frequency drives and HVAC

equipment continue to drive impacts.

Favorable avoided cost and impact variances to filings are attributed to success:

- Trade ally outreach efforts providing training and support to our trade allies who are often the first point of contact for unassigned business customers evaluating energy efficiency projects.
- The Company's internal customer focused outreach teams and targeted customer campaigns providing outreach, education and support to customers.

To date, the leveraging of support costs and the trade ally network across regions has helped to minimize marketing and administrative costs and attributed to the favorable year-to-date variance. However, the potential exists that acquisition costs may increase as the Program continues to mature.

D. Qualitative Analysis

Highlights

Trade ally buy-in has proven to be the most effective way to promote the Program to the Company's business customers. At Program rollout, the Company and WECC took an aggressive approach to contacting trade allies associated with the technologies in and around the Company's service territory. Existing relationships continued to be cultivated during 2012 while recruitment of new trade allies also remained a focus. To date, approximately 450 trade allies across both North Carolina and South Carolina representing the different technologies are signed up as participating trade allies. Their company's name and contact information appear on the trade ally search tool located on the Program's website. This tool was designed to help customers who are not aware of a local trade ally locate a trade ally in their area who can serve their needs and has been revised to incorporate enhanced search criteria functionality. The Company continues to look for ways to engage' the trade allies in promotion of the Program as well as more effective targeting of trade allies based on market opportunities.

During a focus group of lighting and mechanical trade allies that was conducted in December 2011, a suggestion was provided to develop an on-line application submission and status verification system. An on-line application and status verification platform is under development with Ecova and is anticipated to launch in the first quarter of 2013.

The Company recently completed an automated marketing campaign focused on lighting through the use of emailed newsletters and post cards. The marketing campaign was designed to generate leads based on activity taken by the email recipients to the content received. Personalized follow-up is underway based on the leads generated. A second automated campaign is scheduled for 2013 that will focus on HVAC.

An Energy Efficiency Store is also under development, with a second quarter 2013 launch planned, that will provide customers the opportunity to take advantage of a limited number of incentive measures by purchasing qualified products from an on-line store and receiving an instant incentive that reduces the purchase price of the product. The incentives offered in the store will be consistent with current Program incentive levels.

Issues

Participation in lighting continues to be better than expected. However, there are other measures that provide savings to customers that continue to have little or no participation. Examples of these are food services and process equipment. HVAC participation is challenged given dependencies on failed equipment and facility expansions (existing and new construction) that result from measure design. The Company continues to work with outside consultants and internal resources to develop strategies to understand equipment supply/value chains and increase awareness of these measures going forward. Additionally, evaluations of alternative HVAC incentive designs geared to drive early equipment replacements continue.

Another persistent challenge is the continued slow economic recovery which has lead to a reduction in customer payback thresholds and thus reduced elective participation in certain measures:

Potential Changes

Standards continue to change and new, more efficient technologies continue to emerge in the market. The Company will continue evaluating the opportunity to add measures to the approved Program that provide incentives for a broader suite of energy efficient products.

E. Marketing Strategy

Non-residential customers are informed of programs via targeted marketing material and communications. Information about incentives is also distributed to trade allies, who in turn sell equipment and services to all sizes of nonresidential customers. Large business or assigned accounts are targeted primarily through assigned Company account managers. Accounts that do not have an assigned account manager receive information about the Program through direct mail, email and other direct marketing efforts including outbound call campaigns.

The internal marketing channel is comprised of assigned Large Business Account Managers. Segment Managers and Local Government and Community Relations who all identify potential opportunities as well as distribute program collateral and informational material to customers and trade allies. In addition, the Economic and Business Development groups also provide a channel to customers who are new to the service territory.

Marketing Materials

North Carolina Website

http://www.duke-energy.com/north-carolina-business/smart-saver-incentive-program.asp

South Carolina Website

http://www.duke-energy.com/south-carolina-business/smart-saver-incentive-program.asp

F. Evaluation, Measurement and Verification

TecMarket Works, the independent third-party evaluator, provided a memo to the Company presenting impact results of VFD measures on February 2, 2012. The information in the memo was presented to the Company's Collaborative in June 2012.

The savings were summed over each of the VFD measures in the program tracking database. Because the DSMore measure library is not static and grows over time, results are depicted in-two ways depending on-whether results were intended to be applied to replace initial estimates or prospectively. To replace the initial estimates, an average savings value per VFD was calculated for each of the VFD size and type categories used in the DSMore runs. The program savings claim did not distinguish between pumps and fans so the HVAC related savings were averaged across the pump and fan savings at each VFD size. The results of this analysis are shown in Table 1....

Table 1. VFD kWh and kW Savings by Size and Type

HP \ Type	HV	AC	Process		
	kWh∕VFD	kW/VFD	kWh/VFD	kW/VFD	
1.5	1,787	0.26	1,436	0.39	
2	2,401	0.36	1,914	0.52	
3	3,834	0.51	2,871	0.78	
4.	6,181	0.45	3,828	1.04	
5	6,747	0.81	4,785	1.30	
7.5	10,129	1.14	7,178	1.95	
10	14,541	1.80	9,570	2.60	
15	24,856	2.82	14,355	3.90	
20	40,819	4.63	19,140	5.20	
25	41,370	4.31	23,925	6.50	
30	49,497	5.26	28,710	7.80	
40	66,577	5.05	38,280	10.40	
50	79,738	8.70	47,850	13.00	

The program savings claim assumed all HVAC applications were VFD pumps; however, most of the applications were HVAC fans, which carry a lower savings value. Consequently, the savings per VFD were reduced by this analysis. A comparison of the savings per VFD from the original program filing and this analysis is shown in Figure 1.

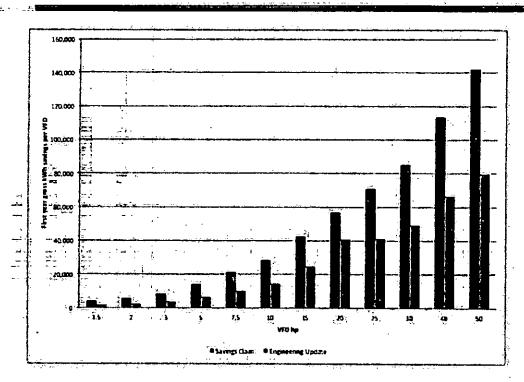


Figure 1. Comparison of Filed Savings with Updated Engineering Estimates

Non-Residential Smart \$aver® Custom Incentives

A. Description

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

The Program's application is for projects that are not addressed by the applications for the Non-Residential Smart \$aver Prescriptive Program. Unlike the Non-Residential Smart \$aver Prescriptive Program, the Program requires pre-approval prior to the project implementation. Proposed energy efficiency measures may be eligible for customer incentives if they clearly reduce electrical consumption and/or demand.

Currently, the following application forms are located on the Company's website under the Smart \$aver Incentives (Business and Large Business tabs):

- Optional planning form that allows customers and their vendors to submit preliminary project information and receive feedback on potential eligibility and tips on filling out the application form.
- Custom Application offered in Word and pdf format with the designated worksheet in Excel format.
 Customers can request the worksheet in another format if preferred. Customers or their vendors submit the forms with supporting documentation. Forms are designed for multiple projects and multiple locations. Custom Incentive Application (doc or pdf), are submitted with one or more of the following worksheets:
 - Lighting worksheet (Excel)
 - Variable Speed Drive (VFD) worksheet (Excel)
 - Compressed Air worksheet (Excel)
 - Energy Management System (EMS) worksheet (Excel)
 - General worksheet (Excel) to be used for projects not addressed by or not easily submitted using one of the other worksheets

The Company contracts with Ecova to perform the administrative review of applications, fulfill payment requests, provide training and technical support to our Trade Ally network and provide call center services to customers who call the Program's toll free number which is specific to the Smart \$aver Program. The engineering firm AESC performs the technical review of custom applications. All other analysis is performed internally at the Company.

Audience

The Company's non-residential electric customers, except those that choose to opt out of the Program, are eligible.

Non-Residential Smart \$aver® Custom Incentives

B & C. Impacts, Participants and Expenses

\$ in millions	Vintage 3 As Filed	Vintage 3 YTD Dec 31, 2012	% of Target
North Carolina Nominal Avoided Cost	\$19.9	\$73.6	369%
South Carolina Nominal Avoided Cost	\$20.7	\$69.1	335%
Program Cost ²	\$9.9	\$12.0	121%
MW ³	4.2	15.4	363%
MWH	26,630.6	113,380.7	426%
Units		67,339	

Notes on Table:

- 1) Numbers rounded: As filed impacts and program costs are from the South Carolina MSAW settlement. North Carolina as filed for program costs, MW and MWH are \$10.2M, 4.3 MW and 26,863.7 MWH; respectively.
- 2) As filed program costs do not include M&V. Actual costs may include M&V. Program costs include \$0.5M of Non Residential Energy Assessments.
- 3) As filed MW are annual maximum peak. We track coincident peak for impacts.

D. Qualitative Analysis

Highlights

Customer interest and participation exceeded expectations in 2012. An average of 44 new applications per month was received in 2012, compared to 25 per month in 2011 and nine per month in 2010. Total amount of custom incentives paid during 2012 was equal to 240 percent of the amount paid in the year 2011. Customers are consistently investing in efficiency projects that are not addressed by the prescriptive incentives. Customers would be able to plan better and Program administrative costs could decrease if some of the measures offered as part of the Program were added to the list of prescriptive incentives.

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 customer which eliminates a barrier for customers that do not have the resources to devote to completing the application.

issues

The Program application process is considered burdensome by some customers due to the technical review required for all projects applying 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 may require some level of engineering expertise. This requirement will continue, thus ensuring that incentives are being paid for cost-effective verifiable efficiency gains. Those technologies that seem to be a good fit for the Non-Residential Smart \$aver Prescriptive Program will be recommended for addition to the prescriptive application. The more measures offered through the Non-Residential Smart \$aver Prescriptive Program, the fewer burdens there are on the customer that prevents participation in the Smart \$aver program.

While the level of interest in custom incentives has increased, the custom incentive team has worked diligently to reduce average application review times. Customers receive an estimate of the total review time with the application receipt acknowledgment. Expedite requests are accommodated whenever feasible without adversely affecting other application reviews.

Potential Changes

Non-Residential Smart \$aver® Custom Incentives

An online application form is in development, with the goal to continue to improve customers' experience with custom incentives.

D. Marketing Strategy

The marketing strategy for the Program is the same as the Non-Residential Smart \$aver Prescriptive Program. 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 an alternative:

E. Evaluation Measurement and Verification

The process evaluation results were presented to the Collaborative in the meeting held in June 2012. The impact evaluation is scheduled for completion near the end of the first quarter of 2013. The impact evaluation will include a tracking system review, sample design and selection, an engineering review of the custom program applications, field measurement and verification of selected projects, data analysis and reporting. This impact evaluation will include case studies of a sample of custom applications covering lighting, process and HVAC technologies.

Smart Energy Now

A. Description

Duke Energy Carolinas, LLC (the "Company") received regulatory approval from the North Carolina Utilities Commission on February 14, 2011 for the Smart Energy Now® pilot program ("Smart Energy Now" or "Program"). The Program is designed to create energy and capacity reductions through behavioral modifications by leveraging the community's commitment to create an environmentally sustainable urban core. The Program targets both occupants and managers of commercial buildings by providing them with more detailed information on the building's energy usage and providing the community's aggregate energy usage data coupled with a customized employee and tenant engagement plan to reduce wasted energy.

Audience

This Program targets customers occupying commercial office buildings in community settings. The target audience is approximately 65 commercial office buildings (buildings with a minimum of 10,000 square feet) within Charlotte city center (as defined by the I-277 loop – see diagram to the right). Building owners, facility managers and building occupants are part of the Program, each playing an important role in achieving energy savings with the commercial office setting.

B & C. Impacts, Participants and Expenses

Smart Energy Now ¹²	ا و المراد و	1	4
	Vintage 3	Vintage 3	% of
\$ in millions	As Filed	YTD Dec 31, 2012	Target
North Carolina Nominal Avoided Cost		\$1.0	
South Carolina Nominal Avoided Cost		\$1.1	
Program Cost		\$1.1	
MW		0.8	1.0
MWH.		4,127.2	27.00
Units ³	÷	34	

Notes on Table:

- 1) Numbers rounded.
- 2) There is no as-filed comparison for Smart Energy Now because it was a new pilot
- in 2012 and was not included in the original filing.
- 3) Units represent the number of customer accounts enrolled.

D. Qualitative Analysis

Highlights

In 2012, the Program team focused on executing on the community engagement strategy and leveraging its learnings to date as well as the input of experts in the field. This meant that the Program was primarily focused on training occupants and property managers from each of the buildings, building relationships with tenant companies and utilizing relationships with facilities personnel in each building. This strategy included both high level awareness activities in the community as well as targeted activities for each of the different buildings.

Smart Energy Now

Key aspects of the project:

Kiosk/Content Design:

A few minor changes have been made to content shown on the kiosk. Several building owners have requested the option to display their building's individual usage on the kiosk. This option is available and several buildings have decided to pursue this option. By displaying this information, tenants will see how their building relates to the community and track progress of their building.

Midway through 2012 and prior to the Democratic National Convention in Charlotte, the team elected to move forward with changes to the kiosk and website that would better engage users and better align the Smart Energy Now and Envision Charlotte brands. This included a full design overhaul, a rotating attract loop with and program information, a design that helped to increase the speed of the touch screen and interactive energy saving information. The changes to the website mirrored the kiosk in design along with better functionality and information for people, groups and companies to "get involved" through launching campaigns or making "pledges to save" on the site.

Normalization of Data:

The Company and Performance System Development ("PSD") completed the work on the Compass Tool. With the completion of the Compass Tool, facility engineers and property managers can log in and see how their building is performing and use the real time 15-minute interval data to make informed decisions on how to best operate their building.

Customer/Community Outreach:

During the first half of 2012, the majority of participating buildings received training on the pilot's energy champions program. The training includes an overview of the Program, information about actions that can be taken in the office space to increase energy efficiency and ending with a brainstorming session on what that specific building could do to kick off an energy saving campaign. Over 800 individuals/ occupants located in the buildings participating in the Program have attended the training. Upon completion of the energy champion training in the majority of buildings, the Program refocused its efforts on building relationships with each of the tenants. The Program team realized that in order to drive change, the messaging needed to come with support from the leadership of each company, so the Smart Energy Now® Team developed the Declaration of Change to get commitment from the leadership of Uptown companies. This has created a top-down approach to compliment the bottom-up approach of the energy champion training. The Declaration of Change campaign is currently in the process of gaining commitment from each company located in Uptown Charlotte to support Smart Energy Now®, promote it to its employees and promote energy conservation in the workplace. The new initiative has had great success and received 40 signed declarations by the end of 2012. This effort will continue through the end of the Program. In addition to the energy champion training, the Smart Energy Now Team has conducted outreach at tenant engagement breakfasts hosted by the property management companies. The Smart Energy Now Team presented program information, energy saving information, details on what companies across Uptown Charlotte are accomplishing through energy saving campaigns and how their company, floor or department could get involved.

In support of its Smart Energy Now Program, the Company has formed strategic partnerships with the US Green Buildings Council (USGBC) and the International Facility Managers Association (IFMA) to continue offering quarterly forums, or Town Hall Meetings. These gatherings are a way for Facility Managers to share best practices and learn about new trends in the industry from experts brought in specifically for the Program. The Smart Energy Now team launched a building recognition program in the last quarter of the

Smart Energy Now

year. This component of the Program recognizes the top performing and top saving buildings to recognize the most dedicated facility engineers in the city. The Smart Energy Now team will utilize the data captured in the Compass Tool to determine those recognized. The recognition event is scheduled for March 2013.

Issues:

There are no major issues to report.

Potential Changes:

No significant changes are planned at this time.

E. Marketing Strategy

The Smart Energy Now team leverages many communication channels to engage tenants, build program awareness and promote energy saving tips and other pertinent information on energy efficient behavior and sustainability. The Program has a communications calendar that lays out bi-weekly emails, bi-weekly blog posts, quarterly newsletters and almost daily tweets. The Smart Energy Now team also leverages social media to engage the Program audience via Linkedln. Smart Energy Now has 750 followers on Twitter, 430 members in the Linkedln Group and 700 subscribers to our email list to date.

F. Evaluation, Measurement and Verification

TecMarket Works ("TMW") has been evaluating the Program since its launch. The evaluation team meets with the program managers for regular update meetings that include the review and modification of the evaluation plan as Program activities evolve.

For the process evaluation, TMW has been conducting interviews with the program manager and other member of the Program team. In addition, the evaluation team conducted an onsite occupant behavior baseline survey in the fall of 2011.

For the impact evaluation report, the original timeline as filed in Docket No. E-7, Sub 1001 Ossege Exhibit 3 indicated that the full report presenting both the process and impact evaluation results would be final in June 2013. However, to ensure the evaluation reflects the Program performance for the three-year Program term, TMW recommends moving the completion date for the impact evaluation report to Q1 of 2014.

For the impact analysis, TMW has been monitoring participants in order to select the sample buildings for the impact evaluation. The team has also constructed and implemented a Building Operators Baseline Practices Survey, conducted a review of the Building Operator Training Sessions and designed and reviewed the implementation of the Facility Manager Actions feature available the Compass Tool.

A. Description

PowerShare® ("Program") is a demand response program offered to commercial and industrial customers. The Program is made up of Mandatory ("PS-M"), Generator ("PS-G"), Voluntary ("PS-V") and CallOption options, and customers can choose from a variety of offers. Under PS-M, PS-G and CallOption, 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). Failure to comply during an event will result in penalties.

Audience

The Program is offered to Duke Energy Carolinas, LLC's (the "Company") nonresidential customers who have not opted out and are able to meet the load shedding requirements.

B & C. Impacts, Participants and Expenses

		Vintage 3	Vintage 3	% of
	\$ in millions	As Filed	December 31, 2012	Target
North Carolina No	minal Avoided Cost	\$25.6	\$28.3	111%
Program Cost ²		\$15.8	\$16.1	102%
MW ³		340.6	374.2	110%
MWH		N/A	N/A	
Units		1	171	1

South Carolina Pow	rerShare ¹		• • • • • •	
		Vintage 3	Vintage 3	% of
	\$ in millions	As Filed	December 31, 2012	Target
South Carolina Non	ninal Avoided Cost	\$35.8	\$31.7	86%
Program Cost ²		\$20.3	\$16.1	80%
MW ³		437.6	374.2	85%
MWH		N/A	N/A	
Units			171	
				

Notes on Tables:

- 1) Numbers rounded.
- 2) As filed program costs do not include M&V. Actual costs may include M&V.

Program costs include approximately \$0.7M in Non Residential Energy Assessments.

3) MW capability derived by taking average over specific PowerShare

contract periods.

Variance

Growth in customer participation has remained slowed in recent months—adding about 9 percent in MW in 2012.

D. Qualitative Analysis

Highlights

PS-Mandatory and PS-Generator have been well received by customers in both North Carolina and South Carolina. Most of the legacy customers enrolled in Interruptible Power Service ("IS") and Standby Generator ("SG") programs in South Carolina and many in North Carolina transitioned to PS-M and PS-

PowerShare®

G, respectively. The legacy SG customers that did not switch are often small generators and do not qualify for PS-G because of the minimum curtailable load requirement.

Issues

In March 3, 2010, the U.S. Environmental Protection Agency (EPA) promulgated national emission standards for hazardous air pollutants (NESHAP) for existing stationary compression ignition reciprocating internal combustion engines (RICE). The EPA incorporated this new requirement into 40 CFR 63 Supart ZZZZ on May 3, 2010. Included in these rules were limitations on the use of "emergency generators" in demand response programs—maximum of 15 hours per year. For example, the current maximum hours for PS-M and PS-G are 100 hours annually. The EPA opened a period of additional comment upon this restriction in February 2011. It is anticipated that the EPA will release any changes resulting from the comment period later this year. The compliance date for existing diesel-fired RICE engines is May 3, 2013. In December 2011, the EPA reached a settlement with several interested parties where the rule would change to a maximum 60 hours annually. In May 2012, the EPA Issued a notice that they wished to change the rule to 100 hours maximum—including testing. It is anticipated that this will result in a change to the rules by January 14, 2013.

The Company continues to see significant participation from the industrial customer segment. The Company is actively reviewing opportunities to increase participation by commercial customers. These businesses have a focus on ensuring tenants and/or customers are comfortable and the major electric end-uses are primarily HVAC and lighting. Therefore, it is difficult for many of these customers to curtail load through the programs up to a 10-hour interruption period. In addition, these customers are less likely to have on-site personnel to manually intervene in systems and settings for curtailment events. On the other hand, the Company has some existing Program participants who indicate that they have the capability and willingness to curtail load on even shorter notification such as five minutes or less. In both of these cases, automated processes to connect the utility signal of a demand response event with the customer's equipment (end-use or generator) would be necessary.

Potential Changes

The Company continues to evaluate some of the nuances of the recent EPA notice of changes to the NESHAP RICE rules. The Company believes at this time that no change to the existing tariffs will be necessary.

The Company entered into an agreement with interested parties in 2011 to create a new measure offer for PowerShare® CallOption. This offer would allow for up to 200 hours of "economic curtailments" and pay the customer a \$50/kW per year capacity credit. This measure has been evaluated and found to be cost effective. The Company filed the PowerShare® CallOption 200/5 measure in November 2012.

The Company is exploring Automated Demand Response technologies that have been deployed in other jurisdictions that could simplify the ways for commercial customers to curtail. By combining these effects across many facilities, like those of a national chain account, load-shedding strategies could be staggered across several stores in order to give a substantial amount of curtailed load without unduly impacting the end-use customer's operation. Program changes that allow for aggregating accounts for the purpose of demand response would be one of the areas that would need to be addressed. These same technologies would enable "fast-DR" strategies with customers who have the capability to curtail load in five minutes or less.

E. Marketing Strategy

Marketing efforts for the Program have focused on the relationship between the Company's account managers and their assigned customers. As part of their normal contact with customers, the Account Managers introduce the Program, including any new options/offers, while explaining the value proposition to the customer. Account Managers share in-house analytical spreadsheets that show the specific

PowerShare®

incentives for each offer as applied to the customer's specific load profile as well as collateral to explain the details of all the Program offers.

F. Evaluation, Measurement and Verification

TecMarket Works, the Company's third-party evaluator, provided the process report for the Program for 2010 and 2011 in January 2012. Several recommendations were included in this report based on interviews with program management and current customers. The results of this evaluation were presented to the Company's Collaborative in June 2012.

Based on the evaluation performed by the Company's staff following the procedures discussed above, the resulting Program impacts during 2011 are produced from the M&V process and should be viewed as the actual load reduction impacts received on event days in 2011. The results of this evaluation were presented to the Company's Collaborative in December 2012.

The Impact evaluation report for the 2012 Program is scheduled to be completed in Q2 of 2013.

A. Description

The Residential Energy Assessments program includes two programs: 1) Personalized Energy Report® and 2) Home Energy House Call.

The Personalized Energy Report[®] ("PER") Program provides targeted Duke Energy Carolinas LLC's (the "Company") customers with a customized report aimed at helping them better manage their energy costs.

This report provides customers:

- Up to 12 months of energy usage history
- · Pie chart breakdown of where energy is being used
- Comparison of their energy usage to similar homes
- Customized energy tips to help save energy and money

The PER Program utilizes two primary marketing channels to acquire customers. Customers receive a direct mail offer that allows them to complete a home energy survey either in hardcopy format or online where customers sign into their Online Services (OLS) bill pay and view environment. Customers who participate in the mailed offer are asked to complete and return the enclosed survey. Once the survey is processed, the customer's Personalized Energy Report is mailed to the customer. Online participants can view and print their report in a PDF format immediately after completing the online survey.

The Company partners with several key vendors in support of the PER Program: McKay, Aclara and Niagara: McKay is responsible for printing the solicitation letters, surveys and final reports. Aclara combines customer usage data with survey responses, provided by Kindred, to produce the customized report. Niagara provides fulfillment of the six CFL bulb incentives.

The Home Energy House Call ("HEHC") Program is a free in-home assessment designed to help customers reduce energy usage and save money. An energy specialist completes a 60 to 90 minute walk through assessment of the home and analyzes energy usage to identify energy saving opportunities. The Building Performance Institute ("BPI") certified energy specialist discusses behavioral and equipment modifications that can save energy and money with the customer. A customized report is provided to the customer that identifies actions the customer can take to increase their home efficiency. Example recommendations might include the following:

- Turning off vampire load equipment when not in use
- Turning off lights when not in the room
- Using CFLs in light fixtures
- Using a programmable thermostat to better manage heating and cooling usage
- Replacing older equipment
- · Adding insulation and sealing the home

Customers receive an Energy Efficiency Starter Kit with a variety of measures that can be directly installed by the energy specialist. The kit includes measures like CFLs, low flow shower head, low flow faucet aerators, outlet/switch gaskets, weather stripping and energy saving tips booklet.

The Company partners with several key vendors in support of the HEHC program: Wisconsin Energy Conservation Corporation ("WECC"), Proto Type, CustomerLink and AM Conservation. WECC administers the assessment component of the program. Additional key vendors include ProtoType for mailing services, CustomerLink for customer care support and scheduling (call center and back office), and. AM Conservation for fulfillment of the Energy Efficiency Starter Kits.

Audience

PER targets the Company's residential customers that own a single-family home with at least four months of billing history.

HEHC targets the Company's residential customers that own a single-family residence 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

Residential Energy Assessment		Vintage 3	Vintage 3 1	% of
	5 in millions	As Filed	YTD Dec 31, 2012	Target
North Carolina Nominal Avoide	d Cost	\$15.9	\$3.6	22%
South Carolina Mominal Avoide	d Cost	\$17.3	\$3.4	20%
Program Cost	Andrey of the	\$6.2	\$2.8	45%
mw¹ ;		8.1	1.4	17%
MWH 1	NEW YORK	54,513.4	9,499.7	17%
Units .	对原数 小型	1.25	27,734	

Notes on Table:

- 1) Numbers rounded. As filed impacts and program costs are from the South Carolina MSAW settlement. North Carolina as filed for program costs, MW and MWH are \$6.2M, 8.2 MW and \$4,990.7 MWH.
- New impacts per M&V extended measure lives by 1 year for Personalized Home Energy report and Online Audit.
- 3) As filed program costs do not include M&V. Actual costs may include M&V.
- 4) As filed MW are annual maximum peak. We track coincident peak for impacts.

D. Qualitative Analysis

Personalized Energy Report Program

Issues

The 2012 Carolinas PER campaign had a 17 percent response which is lower that past response rates of 20 percent. The Company has reached a saturation level with the PER Program.

Potential Changes

The Company's customers will no longer receive CFL bulbs for completing the survey and there will no longer be a hardcopy version of the survey or report. However, customers will still be able to complete the survey online and view their Personalized Energy Report® (PER) online instantly after completing the online survey.

Home Energy House Call Program

Highlights

Smaller and more frequent direct mail campaigns have reduced the wait time between enrollment and assessment completion. Customers may schedule an appointment as early as the next day if they choose or schedule out as far as six weeks. The scheduling tool allows a customer service representative to ease the scheduling process for the customer. The Company has determined that by making this change, customers are less likely to cancel their appointment; ensuring all energy specialists have a full schedule and maximizing their efforts. The HEHC Program has brought on additional energy specialists to handle any over flow of appointments and ensure all customers are served within the appropriate window of time, even those who were not targeted by a direct mail/email campaign.

HEHC continues to test email communications as another potential marketing channel. The test included customers who had elected to receive email correspondence. The response rates are similar to the Program's direct mail rates of 1% to 3%, but the cost per acquisition was much lower. An example of the email message is available in the Appendix. The channel reached an untapped market that may not have responded to the direct mail marketing. HEHC will continue to use this channel and revise messaging to the appropriate audience based on customer PRIZM data.

Analysis has been completed to improve the overall customer experience for the 60 to 90 minute assessments. In addition, assessment questions and procedures have been reviewed to improve the process flow and clarity of energy saving opportunities. Cross selling opportunities of other energy efficiency programs have been incorporated into the assessment to allow customers an opportunity to take action in improving their home's efficiency. Face-to-face training has occurred with all of the energy-specialists which addressed the items listed above. Based on secret shoppers' feedback and quality inspections, the HEHC energy specialists appear to be performing better than ever while engaging with the customer.

The marketing strategy executed from January 2012 through September 2012 did not yield the expected response rates. A new marketing strategy has been developed to address the low response rate. Printed marketing collateral for the HEHC Program has been revised, and promotion of the HEHC Program has been added to the Company's online services home page. As a result of these changes, the response rates have doubled from 1% to 2%.

Issues

HEHC Program participants were sent a follow-up letter, reminding the customer of the audit and providing additional low to no cost ways to continue improving the efficiency of their home. The Company determined the letter did not add any additional value from the audit and sparked more customers asking the Company to provide an extra Energy Efficiency Starter Kit.

Potential Changes

Some program enhancements to increase program impact raise participation satisfaction levels and establish the Company as a preferred energy provider being considered includes:

- Evaluating other measures for the Energy Efficiency Start Kit. Current analysis is taking place to determine market opportunities.
- Removing the geographic limitation and begin to mass promote utilizing our delivery channels and possibly adding new channels through the Company's online services homepage. Expected implementation January 2013.
- Creating a separate customer wait list for those willing to accept last minute appointments.

E. Marketing Strategy

Personalized Energy Report Program

In 2012, the marketing of the Program focused on improving new customer acquisition through the direct mail channel. Homeowners with 12 months of usage history were targeted in order to show a trend in energy use. Additional criteria included customers with above-average energy use who had few CFLs installed in the home.

Targeted customers received a cover letter explaining the benefits of the Program and a survey to complete with a postage-paid return envelope. Within four to six weeks, participants received a Personalized Energy Report ® and a free six-pack of CFLs. A postcard was placed in the bulb packaging that encouraged customers to go online and check their eligibility to receive additional free bulbs. Examples of these marketing materials are available in the Appendix.

Home Energy House Call Program

Program participation is primarily driven through targeted mailings to pre-qualified residential customers. To supplement this activity and keep acquisition costs low, email marketing will be used when targeted customers have elected to receive offers electronically. Utilizing two different marketing channels will increase awareness levels of the Program, thus potentially increasing program participation.

Home Energy House Call program information and an online assessment request form is available at www.duke-energy.com.

F. Evaluation Measurement and Verification

Personalized Energy Report Program

Evaluation activities are currently in progress. The next evaluation is scheduled for the first quarter of 2013.

Home Energy House Call Program 🐾

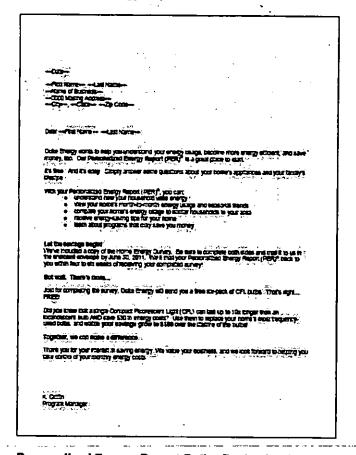
TecMarket Works began the process evaluation with interviews of program management and a sample of participants in the second quarter of 2012. The next process report and impact report is expected in the first quarter of 2013.

5

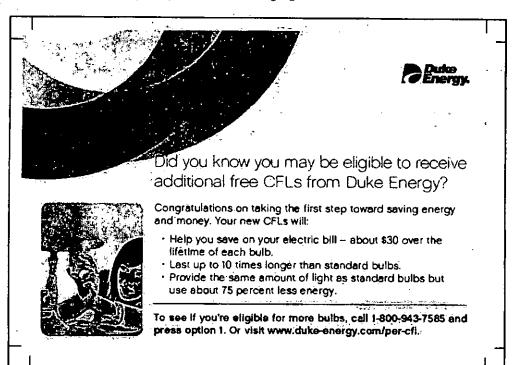
Residential Energy Assessments

G. Appendix

Personalized Energy Report - Cover Letter



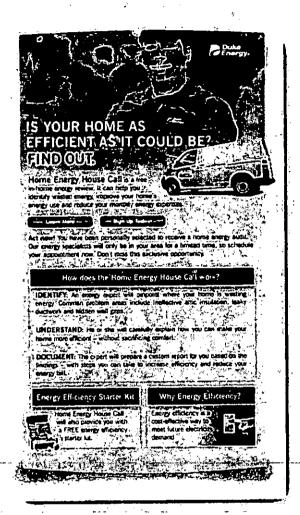
Personalized Energy Report Bulb - Packaging Postcard



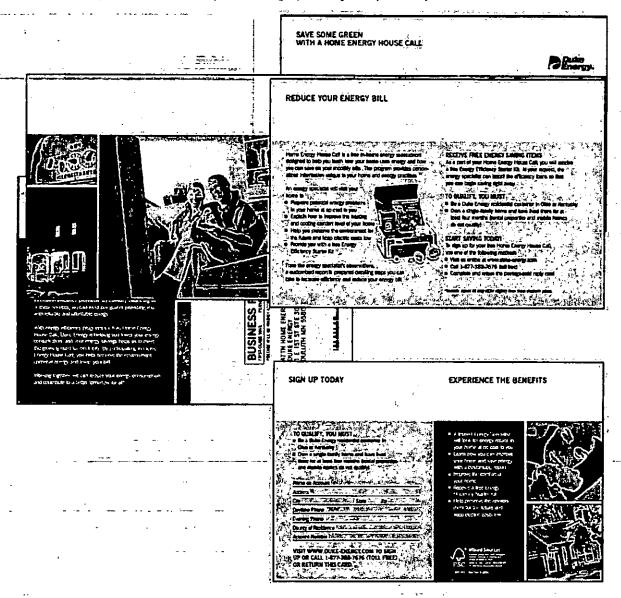
LINGOL A FEELEN AND COMPANY		
FOR THE ADDRESS SHOW	VN ABOVE PLEASE ANSWER THE FOLLOW USAGE FILL IN THE CIRCLES COMPLETE	TING QUESTIONS RELATED TO LY USING BLUE OR BLACK INK.
ROPERTY DETAILS	ी सिक बर्जिट पुत्रा दिवास्तरेत देव संगत ही जैन्द्रीद्वार	11. Heis ald in year blooking springs
	the Manager	€ t-ten
स्टार प्रदेश के ब्रह्म के स्टा के स्टा स्टार प्रदेश के स्टा के स्टा के स्टा	E AMES	En Bir Rose
C familia indicate	en Adriance	Ci 25⊷it pers
© keir/Itmiy		🗘 A janagata
C brain 20-len/Geometri	के साथ के कार के कार कार्या कर के कार कार्या कि कार्या के कार्याक्त की कि कार्या की कि साथ कि कार्या की कार्या की कार्या की	COOLING SYSTEM
(Company)	ACCORDING OF A LOS PROPERTIES	में एक भरेर इसेर र बेहर में के राज अन्त
C Endanger	of part bases, you may charge a leave and well will not part block	12. De partiran a campionista serient (F. com con alutino es consule confirment, por ell
the contract can not been been	△500 < 500	स्ता कर सक्तारम् । सि
क्यांच्या का राज्यका का स्ट्रीयर्थिक स्ट्री	27 50-50	S homisiq (SA
61	C) 100-100	प्रीर Cassel or marketings
₽?	75 200 200 15 200 200	CD Rut Nov
¢1	2 20.79	
	C INC. WE	13. वे इंग्रांकिक का वार्तिय अध्यक्त केन स्पेति हो
O many hour way have property and	C-100-100	122 0 - 0 park
© 8cm (359	(C) 400 e nen	Cuit-tipen
± 199 € 1979	# Saltier	CS IS - Disease
母 1999 - 1983		⇒ 20 pers grate
් (කි- (S)	HÀIN HÈATING SYSTEM, ALE SE	
to impation	TOTAL DIST AND AND SELECT	H Dryon stations of entire at continues?
i me mi	1. Wash to less ent a per press	49.4
c/201	Carrier December	⇔ №
One per lette tim en et el	(C) New Con	15 New Copy States of Page A Car
- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	(Se)	.21
K3	an Property	क्रिके
	CP CP total and and	
Onto your born have a base sent?	C haragonia	_
120 TON BESTER	. Destruction of the second control of the s	If I parameter attended and could be
12 To seems	10 Whith of the fall way bean decreases your covers your	भूगोला बन्ते के दिनोंग का क्यू के त्यान दिनोंग रिकारों के तक कीटी
⇔lo	Course Bushart or eating author	€ 5
	Second or Survey	E Ray
Catholy business and business are many	Sanica bed prop	Cr broghtst.
ARTER SEE THE PERSON NAMED OF THE PERSON NAMED IN	Count name but price	
91 91 5	Carriedor	Į.
කා සා ් කා සා	Supplied.	
(2) (주)	Manufacture spring	1
21 Total		
	2 to per statute	1
	10. To host group	Duke

17. What is your themseus setting for a typical bearing day and a spirical cooling day in the	, 19. Now many people tire in your trace?	25, K. To ple how's mentally post.
and the second	l Öz	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
. Haring		
55 ₹67 *		h. Williams pull wind!
₩ 67-70 °F		
<i>⇒</i> 11–13.5	=:5	
5 H-71°F	_ 	[4:4]
C> 77*F	्रेन कृतिबद्ध ाः ()	The first of the sea on an area on
Thormestas of / No thornestas		
	20. On pair eras or ram this bonne?	⊕ Books
Confiss	⊕ Opp	C. Hamilton
⇔ < ⊕ *	Tax Rant	
CJ 89-72*	· · · · · · · · · · · · · · · · · · ·	₽ .94:
⇔73–76 °F		· 🗅 Russa
to 71 - 78 T	21. What find is used by your make heater?	D M. Hollan
ers 784	(a) Design	
i i	in the Cas	The same than the same of the
The Desired of / No the group start	🚅 विव्यवस्थ	
1		
16. Do you have any of the following constant	<u>.</u>	i. That type if her to the her to be been been been been been been been
155285 in your house?	22. What is the ear of your mater hands?	
. Zana Ziva i dis	□ 0-4pm	C'Brance
A. Cold drain in the states	☐ 5-0 pass	to Secret Care
. 🖙 🕏 .	123-10—14 mars	資 利
<i>-</i> ⊅ b	15-19 nes	C second
	के शहर व त्यां	e day.
h. Supply windows to the whites		-22 Marie Land Angele Dynamic Street Services
⇔ n	Z2: What type of that do you use for cleanes	lating manager of the passes among resulting
⇔ Na	drying).	क्रमानका क्षेत्र (स्वतं (स्वतं) ५ व्यक्ति ।
·	C Diens	CO MICHAEL CONTRACTOR
c. Cooling system will out lamp the lame.	- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	and the second second
conference		Constitution for the second
ett in		De minima
⇔ L	<u> </u>	
	24 What type of final do you use for your cook —	19 for my planning to make any large partition.
4. He sky system will not have the house	mos.	a marrier der meiner alleinen; if vert mene
cool citatio		A SECURITY OF THE PARTY OF THE
Cb	© #500 Ga	
	200	. ○■
	Res	1.2 No see
a. Unional temperatures between cours	GHC #44	5
7 74 - 174 - 174		(31) Part provid Clas in this inner installant is your made?
<u>⇔</u> . b .	25. What type of tool do you use for your orea?	
○ •	Carrier Constant	ず 記
	Con Record Cas	
	See See See See See See See See See	4 - Manmanan
- • .		
<u>a como como esta esta esta esta esta esta esta esta</u>	<u>1</u>	
31. Places print your extell address in the boses below?		A COMMINSTRATION OF A COMMINSTRATION ASSESSMENT
一 有色质点酶细胞酶酶酶酶	美術 医美国电影 电影电影电影	"爷爷?要看我也要看到我吃。"
- Lakitakaninat	Rahar Long & 1 & 1 & 1 & 1 & 1	
	the second of th	the transfer of the control of the section of the s
*द्रारक्त्राच विकास करते हैं होते के दिन	a de la calca company contrata de la contrata del contrata del contrata de la contrata del la contrata del la contrata de la contrata de la contrata de la contrata de la contrata de la contrata de la contrata de la contrata de la contrata de la contrata de la contrata de la c	and reflective to the state of
The second secon	-	

Home Energy House Call E-mail Message



Home Energy House Call Direct Mall Message (January - September)



Home Energy House Call Direct Mail Message (September - Present)



Residential Smart \$aver®

A. Description

The Residential Smart \$aver® Program ("Program") offers a variety of measures that allow customers to take action and reduce energy consumption. The Program includes offers for lighting measures and HVAC measures.

Compact Florescent Lamps Measure

The Compact Fluorescent Lamps (CFLs) measure is designed to increase the energy efficiency of residential customers by offering customers CFLs to install in high-use fixtures within their homes.

The CFLs are offered through multiple channels to eligible customers. The on-demand ordering platform enables eligible customers to request CFLs and have them shipped directly to their homes. Eligibility is based on past campaign participation (i.e., coupons, Business Reply Cards (BRCs) and other Duke Energy Carolinas; LLC's (the "Company") programs offering CFLs). Bulbs are available in 3-, 6-, 8-, 12- and 15-pack kits that have a mixture of 13 watt and 20 watt bulbs. The maximum number of bulbs available for each household is 15, but customers may choose to order less.

Customers have the flexibility to order and track their shipment through three separate channels:

- Telephone: Customers may call a toll-free number to access the Interactive Voice Response (IVR) system, which provides prompts to facilitate the ordering process. Both English and Spanish-speaking customers may easily validate their account, determine their eligibility and order their CFLs over the phone.
- 2) The Company Web Site: Customers can go online to order CFLs. Eligibility requirements and frequently asked questions are also available.
- 3) Online Services (OLS): Customers enrolled in the Company's Online Services may order CFLs through the Company's web site, if they are eligible.

The benefits of providing these three distinct channels include:

- Improved customer experience
- Advanced inventory management
- Simplified program coordination
- Enhanced reporting
- Increased program participation
- Reduced program costs

Property Manager Channel

The Property Manager Channel (the "Channel") allows the Company to target multi-family apartment complexes to direct install CFLs. Honeywell, the third-party vendor, manages distribution of CFLs via this Channel and partners with property managers in both North Carolina and South Carolina to enroll multi-family properties.

This Channel allows property managers to upgrade lighting with CFLs, reducing maintenance costs while improving tenant satisfaction by lowering energy bills. Each apartment may qualify for up to 12 CFLs per unit depending on the size.

Once enrolled, the property manager identifies the number of permanent lighting fixtures available. The Company provides the CFLs but the property manager pays for all shipping costs. The CFLs are

Residential Smart \$aver®

installed in permanent fixtures during routine maintenance visits. The property manager reports the number of bulbs installed to the Company. Honeywell validates this information and provides a report for each individual unit on the property.

Residential HVAC Measures

In both North Carolina and South Carolina, the installation of a high-efficiency heat pump or air conditioner will result in a \$300 Incentive. For replacement of an existing system, the Company's customer receives \$200, and the HVAC contractor receives the remaining \$100. For new home construction, the home builder receives the \$300 incentive but has the option to pass the incentive on to the customer.

The Company filed an application to add tune-ups and seal measures to the Program in both North Carolina and South Carolina. The Public Service Commission of South Carolina issued an Order approving the application on May 23, 2012, and the North Carolina Utilities Commission issued an Order approving the application on August 28, 2012. Eligible customers will receive incentives for the installation of measures such as sealing leaks and upgrading insulation in the attic (initial amount of \$250), upgrading duct insulation (initial amount of \$75), sealing duct systems (initial amount of \$100) and tuning up a heat pump or air conditioner (\$50). All incentives will be paid directly to the Company's customers.

GoodCents administers the HVAC segment of the Program and establishes relationships with home builders and HVAC and home performance contractors ("trade allies") who interface directly with residential customers. These trade allies adhere to Program requirements and submit the incentive application. Once the application is processed, GoodCents disburses the incentive checks to the customer.

In addition, GoodCents is responsible for processing calls from trade allies and customers about the HVAC segment of the Program.

Audience.. ...

The Company's residential customers that meet the eligibility requirements of the Programs

B &C. Impacts, Participants and Expenses-

Residential Smart Saver		·	″ √]‰
\$ in millions	Vintage 3 As Filed	Vintage 3 YTD Dec 31, 2012	% of Target
North Carolina Nominal Avoided Cost	\$22.0	\$63.4	288%
South Carolina Nominal Avoided Cost	· \$23.7	\$63.1	267%
Program Cost ²	\$7.2	\$19.6	272%
MW ³	8.6	24.4	285%
MWH	58,553.4	224,983.0	384%
Units		5,854,957	<u> </u>

Notes on Table:

- 1) Numbers rounded. As filed impacts and program costs are from the South Carolina MSAW settlement. North Carolina as filed for program costs, MW and MWH are \$7.3M, 8.6 MW and 59,066.1 MWH, respectively.
- 2) As filed program costs do not include M&V. Actual costs may include M&V.
- 3) As filed MW are annual maximum peak. We track coincident peak for impacts:
- D. Qualitative Analysis

CFL

Highlights

Many customers have participated in the CFL Program by ordering bulbs through the IVR, OLS and the Company's website. Customers find this process simple and enjoy the convenience of bulbs being shipped directly to their homes. Over 428,298 orders were placed in 2012. Participation is tracked at the account level which allows the Company to focus its attention and resources on non-program participants. Over 49% of the orders were placed through the toll-free phone number, while 26% of the orders were placed through OLS and 25% through the Company's website.

Issues

Analyzing customer data and finding ways to effectively market to non-participating customers.

Potential Changes

Innovative marketing campaigns will be utilized to improve awareness for hard-to-reach and late-adopter customers:

The Company filed notification under the Flexibility Guidelines with the North Carolina Utilities Commission on October 15, 2012 to expand its lighting offer to include specialty bulbs, such as indoor recessed lights, candelabras, three-way bulbs and dimmable bulbs. Building on the insights and lessons learned from the current CFL promotion, the Company will determine best practices and go to market options to inform customers of the specialty bulb offer. The Company plans to offer specialty bulbs in the second quarter of 2013.

CFL offering via Property Manager

Highlights

The Property Manager Program has been well received in both North Carolina and South Carolina. Marketing efforts including direct mail postcards, email campaigns, outbound calls and face-to-face meetings increased participation in the program in 2012. Over 239 properties in North Carolina and 94 properties in South Carolina have successfully installed energy efficient CFLs totaling over 417,000 bulbs.

Issues

During the summer months, many properties do not have the resources available to prioritize CFL installation. Higher unit tumover and air conditioner maintenance and repairs require the maintenance crew's attention. To address this issue, the Company allows property managers 90 days to complete installation.

Additionally, property managers express concern about paying for shipping the bulbs which contributes to lack of participation in the Program.

Potential Changes

To minimize overages, Honeywell will begin subtracting 20% of the bulbs ordered by property managers. Honeywell will continue to educate apartment associations about the Program to increase awareness and participation in the Program. Honeywell will address the shipping issue by paying the shipping cost for the properties which should increase participation.

Residential HVAC

Highlights

The Company and GoodCents continue to form strong relationships with valuable trade allies across both North Carolina and South Carolina. These partnerships help ensure application fulfillment and prompt payment of incentives, as well as maintain top-of-mind awareness of the Program and its benefits.

Issues

The buy-in and participation of the trade ally network is vital to the success of the HVAC segment of the Program. The Company and GoodCents continue to inform the trade ally network of the new measures; however, the Program aims to shift market practices away from some of the more commonly utilized practices which rely heavily on decentralized training and varying knowledge levels, as well as imprecise and manual field calculations, towards industry trained and certified trade allies using higher quality instruments and processes which has proven challenging and has slowed the recruitment process. While some trade allies have registered and are capable of offering the new measures, the Company expects the quantity of trade allies to increase during the coming year due to recently available equipment and increased customer demand.

Potential Changes

Electronic submission of the incentive application is also under development to expedite fulfillment and payment disbursement.

-E. -- Marketing Strategy...

CFL

The overall strategy of the Program is to reach residential customers who have not adopted CFL bulbs. The Company will continue to educate customers on the benefits of CFLs while addressing barriers for customers who have not participated in the Program. Additionally, the ease of Program participation will also be highlighted to encourage use of the on-demand ordering platform;

Direct mail marketing has generated a significant number of orders in both North Carolina and South Carolina. The individual response rates to the different campaigns have averaged around 13%. Samples of the marketing collateral used for these campaigns are available in the Appendix.

Honeywell markets to Carolina property managers through various channels including tradeshows, email and Apartment Association events. Additionally, the Company maintains information on the My Duke website. Multi-family properties in the Carolinas see a promotional offer when they log in to their My Duke profile.

Residential HVAC

Promotion of the HVAC segment of the Program is primarily targeted to HVAC and home performance contractors as well as new home builders. Trade allies are important to the Program's success because they interface with the customer during the decision-making event, which does not occur often for most customers.

GoodCents is responsible for promotion of the Program directly to potential trade allies including HVAC and home performance contractors and new home builders. Program information and trade ally enrollment forms are available on the Program's website to encourage participation. By increasing the participation of trade allies, it ensures more customers are aware of the Program at time of purchase.

The Company implemented several customer marketing campaigns during the third and fourth quarter of 2012 using both the direct mail and email channels to reach customers in South Carolina and utilized the email channel to reach customers in North Carolina during the fourth quarter.

F. Evaluation, Measurement and Verification

CFL

The final process and impact report for the 2011 Smart \$aver Residential Energy Efficiency CFL program was finalized on September 28, 2012. The findings from the report were shared with the Company's Collaborative in December 2012.

Table 1. Estimated Overall Impacts

	Net Savings
nual Savings Per	Bulb Distributed
33.6	30.6
0.0056	0.0051
	33.6

The impacts in this table were calculated using engineering algorithms. These estimates also take into account a participant's tendency to over-report operating hours and the length of daylight at the time of the year the survey results were collected. These two factors and the reasons for their inclusion are explained in their respective sections in the report. The net-to-gross ratio used to calculate net savings is 91.09%. This ratio includes freeridership and spillover and is described in detail in the report.

Significant Process Evaluation Findings

From the Management Interviews

- Overall, this Program was highly successful in meeting its goals and is not experiencing any significant problems. A member of the Company's program management summarized it as "working wonderfully." The IVR and online platforms have performed well and exceeded all goals for increasing CFL participation.
- The Company wants to grow the portfolio to include specialty bulbs in their promotional offer,
 TecMarket Works agrees with this expansion of program offerings.

Consumer education is an area for potentially enhancing CFL acceptance and adoption.

From the Participant Surveys

- Overall program and CFL satisfaction levels are very high, and overall the Company's satisfaction is high.
- The direct mail CFL program in the Carolinas is doing an excellent job of targeting participants with little or no prior CFL use. Prior to the program, CFL saturation was low within the direct mail CFL participant population.
- The desire to "save on utility costs" was the most influential factor in their decision to obtain CFLs via the program. "Desire to save energy" placed second.
- For those participants that used the online CFL order tracking system, the mean satisfaction rating is very high.
- While the two highest rated factors influencing bulb purchasing were energy savings and cost savings, factors often perceived as barriers to CFL adoption such as aesthetics, mercury content and availability of dimmable bulbs were among the lowest rated factors having little effect on adoption and use.
- Outdoor floodlights and dimmable CFLs appear to be the best candidate for a specialty CFL discount program targeting all current CFL participants.

From the Non-Participant Surveys

- Overall satisfaction with the Company across all non-participants surveyed averaged 8.5 out of 10. A high score.
- The most popular reason for not participating in the Program was because customers did not find the offer compelling enough to take action.
- Despite not participating in the Program, nearly two thirds of the non-participants surveyed indicated that learning of the Company's CFL program had increased their awareness about how to save energy by using CFLs. This suggests that the Program is having an energy savings transformative effect on non-participants.
- The desire to save on utility costs and the desire to be environmentally responsible fied as the most influential factors on CFL purchases by non-participants.

Significant Impact Evaluation Findings

- Average wattage of a replaced incandescent is 64.5 watts.
- A first year installation rate of 67.2% was reported, with an ISR of 80.0%.
- Living/family room, master bedroom and kitchen, in that order, are the three most popular room types for bulb replacements; together they make up 63% of all bulb installations.
- Surveyed participants report slightly increased operating hours when switching from an incandescent to a CFL having a very small effect on energy savings.

HVAC

The impact report for the 2010 Residential Smart \$aver HVAC program was finalized on January 27, 2012. The findings from the report were shared with the Company's Collaborative in June 2012.

Table 2 presents a summary of savings associated with the Residential Smart \$aver program. These results were obtained based on a model which uses the results of the engineering analysis within a statistical billing data analysis (the SAE approach). Program participation by HVAC system type, size, SEER and location were applied to the savings per ton obtained in three geographic locations to compute the Program savings.

Table 3. Summary of Program Savings by Measure

Metric ?	Air Conditioner	Heat Pump
Participation Count	2,075	3,588
Gross kW per unit	0.260	0.335
Gross kWh per unit	270.6	636.5
Freeridership rate	32.1%	32.1%
Spillover rate	0%	0%
NTG ratio	67.9%	67.9%
Net kW per unit	0.177	0.227
Net kWh per unit	184	432
Measure Life (years)	15	15
EUL net kWh per unit	2760	6480
Gross Ex Post kWh Savings	561,485	2,283,910
Gross Ex Post kW Savings	540	1,201

The impact report for the 2011-2012 Residential Smart \$aver Program should be complete by Q2 of 2013.

The process report for the 2011-2012 Residential Smart \$aver Program was finalized on November 21, 2012. The findings from the report were shared with the Company's Collaborative in December 2012.

Key Findings from the Management Interviews

- The Residential Smart \$aver Program offered in the Company's service territory as benefited from the experience that the Company has gained from implementing Smart \$aver in the Midwest.
- The total processing time from application to approval to the time the incentive checks were sent
 out was eight business days. From an industry standpoint, this performance constituted best in
 class.

Effective Useful Life (EUL) taken from 2011 Database for Energy Efficiency Resources (DEER) update study; See www.deeresources.com

Key Findings from the Trade Ally Interviews

- A majority (13 out of 21, or 62%) of the trade allies mentioned that they thought ductless air conditioning units and handlers should be considered for the Program – eight trade allies in North Carolina and five in South Carolina mentioned the technology.
- Trade allies mentioned inverter heat pumps and ductless mini-split systems should also be considered for the Program.

Key Findings from the Participant Surveys

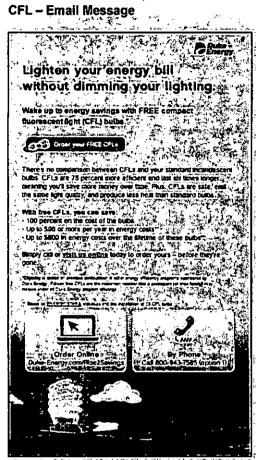
- Customers who participated are generally very satisfied with the HVAC Smart \$aver Program.
 - o 88.2% rated their satisfaction with the Program an "8 or higher" on a 10-point scale, while 40.9% rated their satisfaction a "10 out of 10."
 - o For most customers, their favorite part was saving money through an immediate rebate (66.3%), while saving energy was secondary (mentioned by about 30%, including those who hope to save money from increased efficiency²). A large majority (81.8%) could not name a "least favorite" aspect of participating in Smart \$aver.
- About one quarter of participants Intend to do more than Just HVAC Smart \$aver to improve energy efficiency;
 - 28.9% of participants said they have taken other energy efficiency actions influenced by HVAC Smart \$aver.
 - 22.5% of participants intend to make other major purchases to improve energy efficiency in the next three years.
- Trade allies are very important to spreading awareness (87.7% of customers heard about Smart \$aver from a trade ally) and for getting customers to participate (trade allies filled out Smart \$aver paperwork for 80.7% of customers).
 - Trade allies are especially important for larger installations (multiple rebate households).
 - o Not that many customers heard about Smart \$aver directly from the Company via brochures (2.7%), or the web site (2.1%), or even advertising (6.4%).
- Customers are also generally very satisfied with the Company;
 - o 87,2% rated their satisfaction with the Company an *8 or higher" on a 10-point scale, while 41,2% rated their satisfaction a *10 out of 10.*
 - Dissatisfied customers most often complained of rate increases and the price of energy in general. Some also mentioned problems with loss of power.

Recommendations

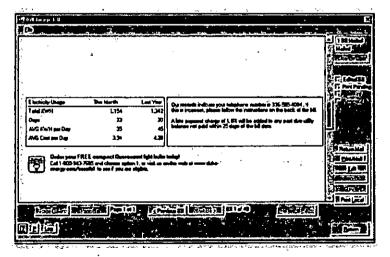
Based upon the management interviews, the evaluation team has no recommendations for Improving the Program at this time. However, because the Company has selected a new vendor to manage the trade ally network and to process the applications, we recommend that the Company monitor the performance of the new vendor to see if they are able to maintain the high participation rates that the Smart \$aver Program historically enjoys. If participation drops, whether from trade allies or customers, the Company may wish to consider another process evaluation to determine the cause of the decrease. Otherwise, the evaluation team recommends that the new vendor be given one year to two years to implement Smart \$aver before another process evaluation is conducted.

² This percentage also includes those that responded with "like saving energy and being more efficient in general" and "like learning about how to be more energy efficient in the future," and "like saving resources/ conservation/benefiting future generations/going green."

G. Appendix

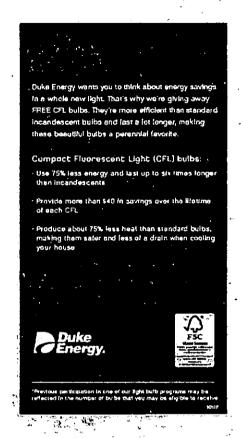


CFL - Bill Message



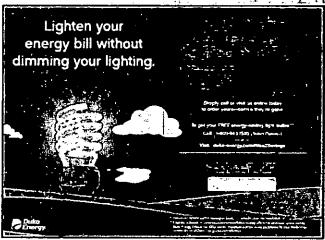
CFL - Bill Insert

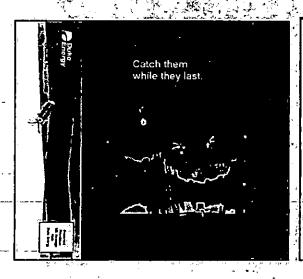


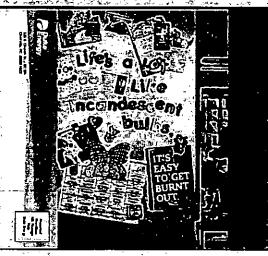


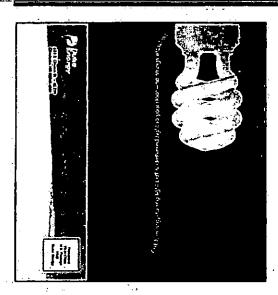
CFL - Direct Mail Campaign Targeting New Customers

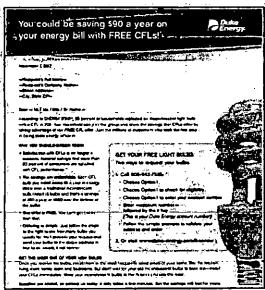


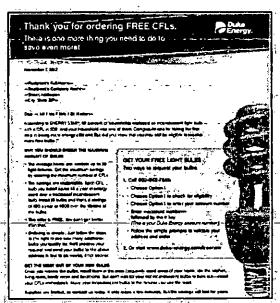




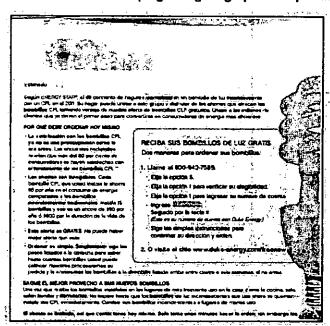








CFL- Direct Mail Campaign Targeting Spanish-Speaking Customers





CFL - Newspaper Advertisements

BUY NONE GET SOME FREE

Want to save big now and save even bigger later? Great! Because Duke Energy is giving away FREE energy efficient light bulbs to customers'—no strings attached. Heck, we'll even deliver them for FREE!



So, how do you take advantage of this steal of a deal? It's easy.

Call 800.943.7585 (select option 1) or visit us online at www.duke-energy.com/CFLcoupon

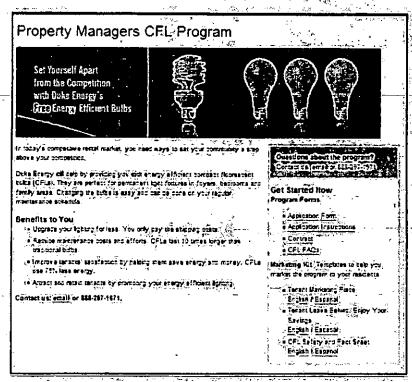


*Lighting is based as previous paracopsion in other Culie Energy energy

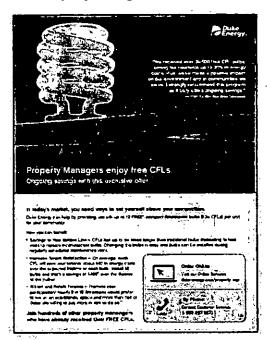
CFL Property Manager Channel - State Landing Page Promotion

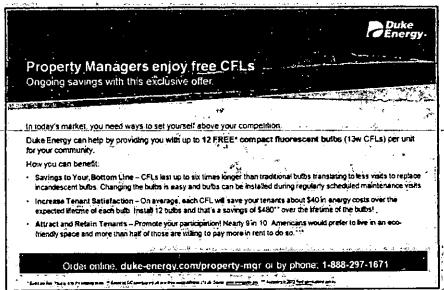


CFL Property Manager Channel - Web Page



CFL Property Manager Channel - Direct Mail Promotions





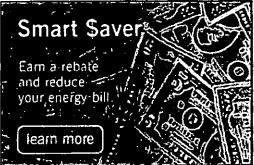
Residential HVAC - Online State Landing Page Promotions





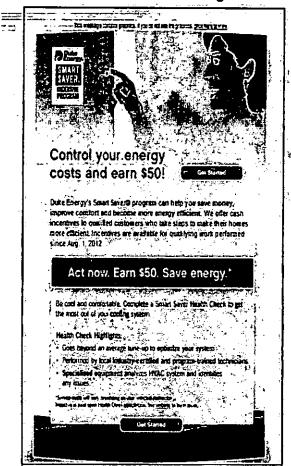
Residential HVAC.- Online Services Promotions »

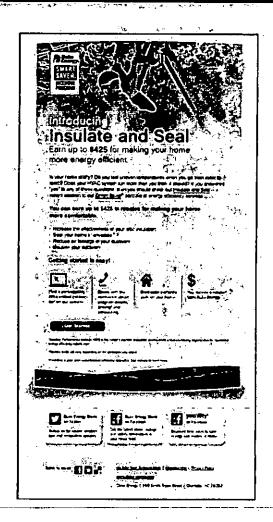






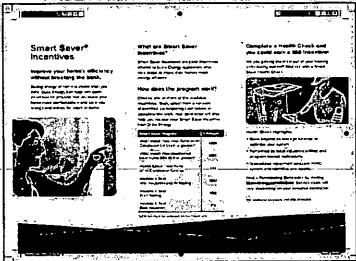
Residential HVAC - Email Message

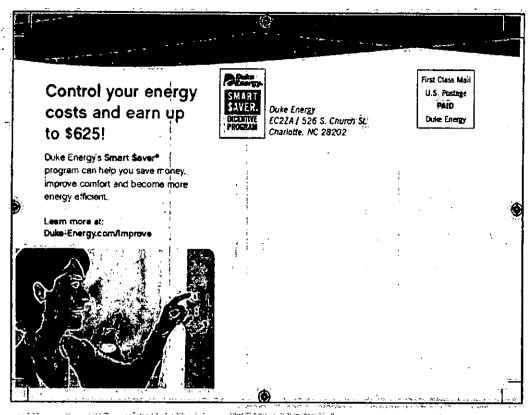


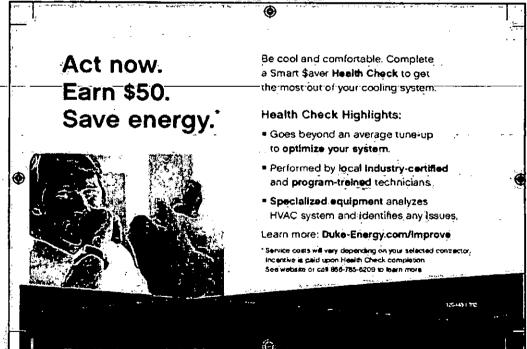


Residential HVAC - Direct Mail Promotions









Low Income Energy Efficiency and Weatherization Assistance Program

A. Description

The purpose of the Low Income Energy Efficiency and Weathertzation Assistance Program ("Program") is to assist low income customers with energy efficiency measures in their home to reduce energy usage. There are two offenings currently in the Program; weatherization and equipment replacement.

Weatherization and Equipment Replacement Assistance is available for up to 5,000 qualified customers on the Duke Energy Carolinas, LLC's (the "Company") system in existing, individually metered, owneroccupied 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 of the Company's energy efficiency programs for the same energy efficiency measure provided under this Program.

The weatherization and equipment replacement programs were not implemented in 2012. The Company planned to work with the state weatherization program administrators from North Carolina and South Carolina to provide a utility offered weatherization program to eligibility customers. However, due to the distribution of American Recovery and Reinvestment Act (ARRA) funds in 2009, both North Carolina and South Carolina state weatherization program administrators requested the Company delay the utility-offered weatherization and equipment programs. The Company Is currently working with contacts from the state administrator's office for North Carolina and South Carolina to implement a utility-offered program.

Audience

Availability of this Program will be coordinated through local agencies that administer state weatherization programs, and the agency must certify that the household income of the participant is between 150% and 200% of the federal poverty level.

B &C. Impacts, Participants and Expenses

Low Income Energy Efficiency and Weatheriza	rtion Assista	nce ¹	
	Vintage 3	Vintage 3	% of
\$ in millions	As Filed	YID Dec 31, 2012	Targe
North Carolina Nominal Avoided Cost	\$16.2	\$0.0	0%
South Carolina Nominal Avoided Cost	\$17.9	\$0.0	0%
Program Cost ²	\$9.2	\$0.0	0%
MW ³	7.3	0.0	0%
MWH	53,924.6	0.0	0%
Units		0	

Notes on Table:

- 1) Numbers rounded. As filed impacts and program costs are from the South Carolina MSAW settlement. North Carolina as filed for program costs, MW and MWH are
- \$9.3M, 7.4 MW and 54,396.7 MWH, respectively.
- 2) As filed program costs do not include M&V. Actual costs may include M&V.
- 3) As filed MW are annual maximum peak. We track coincident peak for impacts.

Low Income Energy Efficiency and Weatherization Assistance Program

D. Qualitative Analysis

Highlights

The residential Smart \$aver® program offers CFLs to eligible residential customers in North Carolina and South Carolina through the automated Interactive Voice Response (IVR)/Web platform. The number of income qualified program participants requesting free CFLs from the residential Smart \$aver® CFL program far exceeds the participation rate achieved in the Agency Assistance Kit program.

The Company continues to partner with local agencies by providing CFL postcards that include information on the free CFL offer and instructions on how to place orders. An example of this postcard is included in the Appendix.

Issues

Both the state of North Carolina and South Carolina received extensions to continue funding the state's weatherization program with ARRA funding. The Company continues to have active discussions with the state weatherization program administers for both North Carolina and South Carolina to define a plan for a utility offered weatherization program that supports the state's weatherization program in the post-ARRA environment.

Potential Changes

The Company is evaluating potential Program changes to the approved weatherization and refrigerator replacement programs in an effort to align with the state weatherization program in post-ARRA environment.

E. Marketing Strategy

Low income agencies receive a supply of postcards to distribute to clients who are customers of the Company. The postcards provide instructions for customers to request CFLs by phone or web and have CFLs delivered directly to their home.

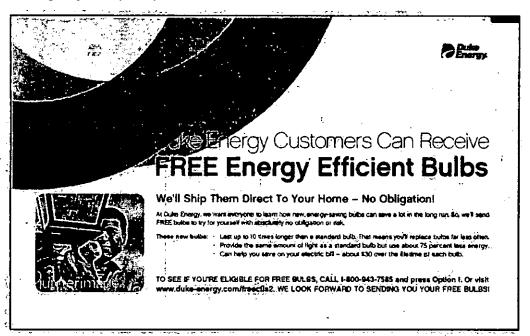
F. Evaluation, Measurement and Verification

There are no evaluations scheduled at this time.

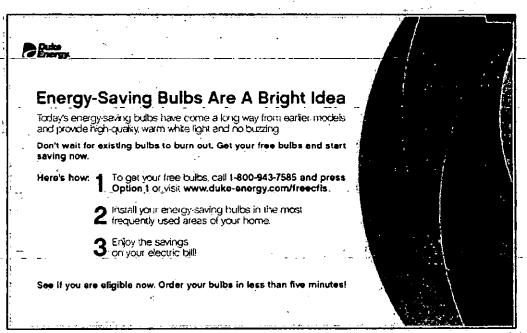
Low Income Energy Efficiency and Weatherization Assistance Program

G. Appendix

CFL Agency Card (Front)



CFL Agency Card (Back)



A. Description

The Energy Efficiency Education Program for Schools ("Program") is an energy efficiency program available in North Carolina and South Carolina. The Program is available to kindergarten through twelfth grade students enrolled in public and private schools who reside in households served by Duke Energy Carolinas, LLC (the "Company").

The Program provides principals and teachers with an innovative curriculum that educates students about energy, resources, how energy and resources are related, ways energy is wasted and how to be more energy efficient. The materials focus on concepts such as energy, renewable fuels and energy efficiency through classroom and take home assignments, enhanced with a live theatrical production performed by two professional actors.

The Program performance educates students about energy efficiency in homes and schools through innovative lessons based on science and math related curriculum. School principals are the main point of contact and will schedule the performance at their convenience for the entire school. Once the principal confirms the performance date and time, two weeks prior to the performance, all materials are delivered to the principal's attention for classroom and student distribution. Materials include school posters, teacher guides, classroom and family activity books and interactive activities such as online home audits that engage families in the learning experience.

Students are encouraged to complete a home energy survey with their family (included in their classroom and family activity book) to receive an Energy Efficiency Starter Kit. The kit contains specific energy efficiency measures to reduce home energy consumption.

The current Program is targets and educates kindergarten through eighth grade students. The Company partners with a third party vendor, The National Theatre for Children, to administer the Program.

Audience

Eligible participants include the Company's residential customers who reside in households with schoolage children enrolled in public and private schools.

B &C. Impacts, Participants and Expenses

Vintage 3	Vintage 3	% of
s As Filed	YTD Dec 31, 2012	Target
\$41.8	\$4.6	11%
\$49.0	\$4.3	9%
\$13.6	\$2.9	21%
23.9	1.7	. 7%
121,981.7	8,963.5	· 7%
	40,485	
	\$41.8 \$49.0 \$13.6 23.9	As Filed YTD Dec 31, 2012 \$41.8 \$4.6 \$49.0 \$4.3 \$13.6 \$2.9 23.9 1.7 121,981.7 8,963.5

- 1) Numbers rounded. As filed impacts and program costs are from the South Carolina MSAW settlement. North Carolina as filed for program costs, MW and MWH are \$13.7M, 24.2 MW and 123,049.8 MWH, respectively.
- 2) As filed program costs do not include M&V. Actual costs may include M&V.
- 3) As filed MW are annual maximum peak. We track coincident peak for impacts.

D. Qualitative Analysis

Highlights

The Company is helping bring arts and theatre back into the school while providing an important message about energy efficiency through a new importance delivery channel for children. Enhancing the message with a live theatrical production truly captivates the children's attention and reinforces the curriculum material provided by teachers. In advance of the live performance, school administrators are sent printed materials including workbooks, teacher guides, and classroom and contest posters. The recruitment approach of contacting the principal has been extremely successful. Throughout the 2011-2012 academic year, 762 schools participated in the Program across North Carolina and South Carolina, exceeding the goal of 600. Projections for 2012-2013 are to reach over 700 schools.

The National Theatre for Children has a database with principal and teacher information that can be overlaid with the Company's service territory to determine the areas with the highest propensity of the Company's residential customers. The Program opened with 16 sets of actors during the 2011-2012 academic year throughout the Company's service territory. The logistics of these "troupes" and the scheduling tool of the National Theatre for Children minimize scheduling constraints resulting in less than five percent of schools canceling and not rescheduling their performance.

Through the performance, Nikki Neutron, the energy hero, encourages students to go online to complete their survey and receive their Energy Efficiency Starter Kit and help save the world. With this message to students, the response rate for online survey completions has been successful. Surveys can be completed online or by paper, with the majority being completed online. During the 2011-2012 academic year, two schools per state were awarded a \$1,000 cash prize for completing the most surveys. Winning schools were those with the highest raw number and highest percentage of home energy surveys submitted. The Company will continue to recognize schools for the 2012-2013 academic year to enlist survey signups for Energy Efficiency Starter Kits. A website was developed, trackmysignups.org, for principals, teachers and students to view their school's progress and compare sign ups to other schools in the area which helps foster community involvement.

AM Conservation, the kit vendor, pre-builds the Energy Efficiency Starter Kits which shortens the kit delivery time. When the Energy Efficiency Survey is completed and eligibility is determined, the kit is shipped-and-received-within-two-to-four-weeks. The quicker-turnaround time-of-the Energy-Efficiency-Starter Kit creates a higher level of engagement along with an increased likelihood that the customer will install items from the kit and return the Family Business Reply Card (BRC). The BRC provides the Company the opportunity to solicit and receive feedback from the customer and validate items in the kit being installed.

To ensure customer satisfaction with the Energy Efficiency Starter Kit and installation of items takes place, the Program team developed an email campaign to send emails to families. The email includes a reminder which is sent two weeks after successful kit delivery to encourage families to return their BRC. To further encourage BRC returns, one family per academic year wins a cash prize as part of a family contest drawing. During the 2011-2012 academic year, BRC response rates were 25 percent.

Issues

The National Theatre for Children has overcome several challenges. With the level of success the Program has achieved, new challenges arise such as:

- Developing a strategic acquisition approach to minimize non-Company student participation in the Program.
- Determining a way to continue to engage children who have already participated in the Program but are disqualified from receiving the same Energy Efficiency Starter Kit year after year.

Potential Changes

The National Theatre for Children is working closely with the Company to enhance the Program by:

- Partnering with the Company's Large Business Account Managers and Community Relations
 District Managers to leverage existing relationships as an additional acquisition channel.
- Developing an alternative kit for customers who have already participated in the Program.
- Enhancing all data processing methods.

As the Program continues to evolve in 2013, there will be additional enhancements to be made and improve the customer's experience when participating in the Program.

E. Marketing Strategy

The National Theatre for Children is responsible for all marketing campaigns and outreach. The National Theatre for Children utilizes direct mail and email sent directly to principals for Program acquisition.

F. Evaluation Measurement and Verification

TecMarket Works conducted a process evaluation of the Program during 2012 with a final report presented on November 27, 2012. The impact report is scheduled to be completed in Q1 of 2013.

Significant Process Evaluation Findings

Key Findings from the Management Interviews

The Program is a solid, well-run program with an excellent network of implementers to support and
exceed the Company's distribution goals for the Program. Although the Program has only been
offered since 2011 in the Carolinas, the Program is exceeding its goals for Energy Efficiency Starter
Kit distribution.

Key Findings from the Performance Reviews

- The performers are professional and courteous. They arrived at each school on time and always set up and readied their efforts well before the students arrived.
- "The Energized Guyz" performance was well-received by the students and got children excited about and focused on receiving their Energy Efficiency Starter Kit.
- Every staff person we spoke with indicated that The National Theatre for Children was "wonderful" to work with.
- The troupes successfully altered the complexity of the material presented to match the
 comprehension ability of the age of the children attending. This is important because if the
 information is too advanced to understand, the lessons are lost to the younger children, and if the
 lessons are too simple, the older students lose Interest.

Key Findings from the Participant Surveys

Two hundred and two (202) participating student families that live in the Company's service territory in the Carolinas participated in an online survey which asked about what kit items they used and their satisfaction with the items. Surveys were completed by 102 households in North Carolina and 100 households in South Carolina.

The most commonly installed items, with installation rates of 75% or higher, were the kit's lighting items: 13-watt CFLs (87.6%), 18-watt CFLs (77.2%), and the night light (78.7%). These data indicate the kits are being well received and the kit items are being installed. The Department of Energy (DOE) booklet was the only other item used by over half of respondents (68.8%), although most of the remaining items had installation rates of over 40%. The kit items that respondents were least likely to use were the bathroom aerator (31.7%) and the water flow meter bag (21.3%). Ratings of satisfaction by those who

installed the kit items generally range from 8.5 to 9.5 on a 10-point scale, except for the water flow meter bag (mean rating 7.95).

المراجعة المحموض المحموض		
Diseasoned Addis	Percent installed or Used	Mean Satisfaction Score
13-watt CFL	87.6%	8.53
night light	78.7%	9.44
18-watt CFL	77.2%	8.99
booklet 2	68.8%	9.22
kitchen aerator	48.0%	8.71
low flow showerhead	45.5%	8.38
water temp card	42.6%	9.30
switch and outlet gaskets	41.1%	8.93
bathroom aerator	31.7%	9.09
water flow meter bag	21.3%	7.95

Recommendations

Consider the development of a second kit so that troupes can visit a school more than once in a three-year period, as long as cost effective savings are achieved.

Inform troupes that slowing their rate of speech may improve students' comprehension of the material they are presenting. The typical adult speaks 160 words per minute. The central nervous system of pre-school through third grade children can process about 120 words per minute. Fourth grade students process 124-128 words per minute2.

Consider revising the script so that saving energy is equated with their families lowering their utility bills and supporting environmental stewardship.

Distribute the kit's "Decoder Ring" to each of the troupes. This ring was much more effective than the night light in getting the children excited about ordering the kit, and it can be easily incorporated into the script.

² Banotai, Alyssa, "How to Talk to Children," ADVANCE Speech-Language Pathologists & Audiologists, Vol. 18, Issue 3, January 21, 2008.

http://speech-language-pathology-audiology-advanceweb.com/Article/How-to-Talk-to-Children.aspx

^{3 &}quot;Spot checks" were conducted on portions of the performances using a timer and the known count of words used by the actors from the script. While these checks were not scientific, overall speech rates were found to be slightly too fast for the ages of the audience.

Residential Retrofit

A. Description

The purpose of the Residential Retrofit program (*Program*) is to aid residential customers in assessing their energy use, to provide recommendations for more efficient use of energy in their homes and to encourage the installation of the energy efficiency improvement by offsetting a portion of the cost of implementing the recommendations. The Program was approved by the Public Service Commission of South Carolina on February 24, 2010 and the North Carolina Utilities Commission on January 25, 2011.

Audience

The Program is available for up to 300 customers in North Carolina and up to 100 customers in South Carolina who live in owner-occupied single-family residences served on a residential rate schedule from Duke Energy Carolinas, LLC's (the "Company") retail distribution system.

B &C. Impacts, Participants and Expenses

Residential Retrofit ¹²		<u>जिल्ल</u>		,
		Vintage 3	Vintage 3	% of
	\$ in millio	ons As Filed	YTD Dec 31, 2012	Target
North Carolina Nominal Avoid	ed Cost		\$0.3	
South Carolina Nominal Avoids	ed Cost	!	\$0.3	
Program Cost			\$0.2	
MW			0.0	
MWH			283.7	
Units			65	
Nicker of Table			63	L

Notes on Table:

- 1) Numbers rounded.
- 2) There is no as-filed comparison for Residential Home Retrofit because it was a new pilot in 2011 and was not included in the original filing.

D. Qualitative Analysis

South Carolina Pllot

Highlights

The South Carolina Residential Retrofit program launched in August 2010 as Energy Solutions @ Home (ES@H). ES@H was designed as a bundled energy efficiency solution for homeowners where trained energy professionals identify and install high impact energy home improvements. When homeowners make energy improvements to their homes, they receive on-going energy savings from lower heating and cooling costs because the leaky gaps and non-insulated areas of their homes are eliminated. It is an easy process for the customer because the Company identifies the most effective energy-saving home improvements, provides a team of energy experts including skilled contractors and offers an incentive to-lower the customer's installation cost.

The Program focuses on the top four energy home improvements air sealing, attic insulation, duct sealing and duct insulation. Offered individually of in combination, when these improvements are correctly installed, they substantially lower the amount of energy loss in a home and provide the greatest energy savings opportunities:

The process includes three steps and begins with a phone call.

7

Residential Retrofit

Step 1: Phone Assessment

The Company helps customers determine if they are a good candidate for the offer via a short phone conversation with one of the Company's Energy Experts ("Expert"). The Expert uses energy audition software to conduct a high-level assessment of the customer's home considering the home's age, size, heating equipment, electric use and estimated insulation levels. The customer receives the following results during the call:

- Installation recommendations
- anticipated energy savings and payback
- estimated installation cost
- estimated incentive amount

With the Expert's assistance customers decide if these improvements are right for them. If so, the Expert then helps the customer take the next step by scheduling an in-home assessment.

Step 2: In-home Assessment

A Building Performance Institute (BPI) certified assessor visits the home listens to the customer's concerns and verifies or updates the information collected during the phone call. Using the same audit tool, the assessor produces a final project plan on-site with the final recommendations, exact costs, custom incentive and out-of-pocket payment amount. In addition, the project plan includes the estimated energy savings and project payback period.

Step 3: Installation

Customers who agree to the project plan are contacted by their assigned program contractor to schedule the installation. When the work is complete, the utility-offered incentive is deducted from the contractor's invoice as an immediate customer benefit.

Issues

The Program was based on the hypothesis that customers wanted a high touch turn-key offer, and a custom incentive that paid a higher incentive to the more inefficient homes would drive demand from inefficient customers. A bidding process was used to select two local building envelope contractors to handle-the-energy-efficiency installations. The Program was marketed to homeowners in the Gaffney, Spartanburg and Greenville areas from August 2010 through March 2011. Over 5,800 customers were targeted in one of five different direct mail campaigns. Only four South Carolina pilot participants completed the full program requirements by installing the recommended improvements in their homes. The achieved Program participation was much lower than expected. Due to low participation, the Program was deemed non-cost effective.

Customers were reluctant to commit to a program with a custom incentive because of the uncertainty of the amount of incentive they would receive. Customers wanted greater flexibility in selecting an installation contractor and the types of improvement installed. Many customers did not believe their homes were inefficient; therefore they did not feel the offer applied to them:

Post-Pilot Plans

A high touch turn-key approach did not deliver the level of participation expected. Due to results of the pilot program, the Company will not move forward to commercialize this Program. Instead, the Company filed to offer attic insulation and air sealing, duct insulation and sealing, and HVAC tune-ups as part of the residential Smart \$aver program as a prescriptive offer. The Public Service Commission of South Carolina approved the Company's request to add tune-ups and seal measures to the residential Smart \$aver program on May 23, 2012.

Residential Retrofit

North Carolina Pilot

Highlights

The Program was approved by the North Carolina Utilities Commission on January 25, 2011. The Company, through its partnerships with three cities -- Carrboro, Chapel Hill and Greensboro -- offered the Program to eligible customers. The Carrboro program began June 1, 2011 with information on the City of Carrboro's website and contractor education. The Chapel Hill program began in July 2011, and the Greensboro program began in December 2011. The Company provided sales training to contractors in each of the pilot locations on June 15 and 16, 2011 to help the installers and contractors close more projects.

The Company supported the city-offered Program by providing a financial incentive to encourage the installation specific high efficiency home improvements, attic insulation and air sealing, duct sealing and duct insulation. Incentives offered by the Company were paid after verification that the qualifying improvements have been installed. The incentive offered by the Company was in addition to the incentives provided by the City's Program The Chapel Hill/Carrboro Program had 57 participants, and the Greensboro Program had 33 participants.

lesues

There were no issues with this Program.

Post-Pilot Plans

TecMarket Works completed a Desk Review on the Program offered to North Carolina pilot participants. Based on results of the Desk Review and information learned from pilot participants, the Company will not file to commercialize the Program. Instead, the Company filed to offer attic insulation and air sealing, duct insulation and sealing, and HVAC tune-ups as part of the residential Smart \$aver program as a prescriptive offer. The North Carolina Utilities Commission approved the Company's request to add tune—ups and seal measures to the residential Smart \$aver program on August 28, 2012. On October 19, 2012, the Company filed notification that the Program would not be fully-deployed.

E. Marketing Strategy

South Carolina Pilot

Marketing for the South Carolina pilot Program began in August 2010 using direct mail to reach the targeted customers. The multiple campaign mailings were mailed based upon customers' geographic location. The mail drops allowed contractors and auditors to serve customers efficiently, with minimum travel between the homes of pilot participants. The Program tested several direct mail campaigns to generate interest in the Program. The direct mail campaigns tested include a self-mailer, a postcard, a series of three postcards on the same theme, and a letter followed by a postcard coupled with outbound calls. In addition, the Company marketed the Program via the website where program descriptions, video and frequently asked questions provided the customer with detailed information on the Program. Marketing of the pilot Program ended in March 2011 due to low participation.

North Carolina Pilot

The Company partnered with three cities and their Program contractors to promote the pilot Program. Contractors were provided information on the Program along with marketing collateral to educate customers. The Company's offer was also promoted on the Program websites.

Residential Retrofit

F. Evaluation Measurement and Verification

The desk review completed by TecMarket Works was filed on October 19, 2012 with the North Carolina Utilities Commission...

My Home Energy Report

A. Description

The My Home Energy Report ("MyHER" or the "Program"), formerly known as 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. The report provides customer specific energy saving recommendations for more efficient use of energy in the customer's home.

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 delivers energy savings by encouraging customers to alter their energy use. The monthly energy usage of each home is compared to the average energy usage of neighbors in similar home types for the same period as well as the most efficient 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 offers, rebates or audit follow-ups from other Company offered programs are offered to customers; based on the customer's energy profile.

Duke Energy Carolinas, LLC (the "Company") piloted the Program under the name Home Energy Comparison Report in South Carolina. The Public Service Commission of South Carolina approved the commercial program on May 2, 2012. The North Carolina Utilities Commission approved the commercial filing on September 11, 2012.

Audience

The audience is the Company's customers, identified through demographic information, who are likely to decrease energy usage in response to the information contained in the MyHER report. These customers resided in individually-metered, single-family residences receiving concurrent service from the Company.

B & C. Impacts, Participants and Expenses

My Home Energy Report	İ	1	-Fac 9
\$ in millions	Vintage 3 As Filed	Vintage 3 YTD Dec 31, 2012	% of Target
North Carolina Nominal Avoided Cost		\$2.9	The second second second
South Carolina Nominal Avoided Cost	·	\$3.1	
Program Cost		\$3.0	
MW ³		10.5	• • • •
MWH ³		49,339.50	
Units		702,215	
Notes on Table:	•		

- 1) Numbers rounded.
- 2) There is no as-filed comparison for My Home Energy Report because it was a not included in the original filing.
- 3) Impacts incremental to 2011 achievement.

D. Qualitative Analysis

Program participants are encouraged to contact the Company with their questions, comments and report corrections. Customers contacting MyHER customer support represent eight percent of all customers receiving the reports. Report corrections continue to generate the largest number of inquiries. Customers wishing to be removed from the Program represent less than one percent of program participants.

My Home Energy Report

Highlights

The Company has received calls, letters and emails from customers thanking the Company for offering the Program. Customers have given examples of how they have used the information provided in MyHER to reduce their energy usage. Customers not receiving MyHER find out about the Program from their neighbors and have called and asked to be added to the Program.

leguas

A high percentage of calls to customer support are unrelated to MyHER. The calls are related to billing concerns or to outage reporting. The Company believes that many customers save their reports for reference, and the phone number included for customer support is easy to locate and call. The Company installed an integrated voice report system (IVR) for the MyHER customer support line. With the implementation of the IVR, the number of calls routed to the MyHER customer support team has declined by approximately 40%.

Potential Changes

The Company modified the report of customers who are more efficient than the average home to show their comparison with an "Efficient Home." The Company is researching opportunities to expand the report to additional residential customers.

E. Marketing Strategy

Marketing for the Program consists of proactive reports currently distributed through direct mail and supported with a program website featuring additional information on the reports, Frequently Asked Questions (FAQs) and contact resources.

F. Evaluation, Measurement and Verification

The proposed Evaluation, Measurement & Verification (EM&V), plan includes a process for isolating energy savings attributable solely to the Program and an analysis of persistence on an annual basis. Upon receiving the Order from the North Carolina Utilities Commission, the EM&V plan has been revised to include an analysis of the impact of tariffs on potential program savings, provided that there is a sufficient pool of participants. A process and impact evaluation is currently being conducted for the 2012 program year.

Appliance Recycling Program

A. Description

The Appliance Recycling Program ("Program") promotes the removal and responsible disposal of operating refrigerators and freezers from Duke Energy Carolinas, LLC's (the "Company") residential customers. The refrigerator or freezer must have a capacity of at least 10 cubic feet but not more than 30 cubic feet. The Program recycles approximately 95% of the material from the harvested appliances.

Audience

Eligible Program participants include the Company's residential customers who own operating refrigerators and freezers used in individually metered residences:

B &C. Impacts, Participants and Expenses

Appliance Recycling 12			: -
	Vintage 3	Vintage 3	% of
<u>\$ in millions</u>	As Filed	YTD Dec 31, 2012	Target
North Carolina Nominal Avoided Cost		\$1.0	
South Carolina Nominal Avoided Cost	\$0.0	\$1.0	
Program Cost	\$0.0	\$0.3	1.
MW	\$0.0	0.4	
MWH	\$0.0	1,971.5	
Units ³		1,990	

Notes on Table:

- 1) Numbers rounded.
- 2) There is no as-filed comparison for Appliance Recycling because it was not included in the original filing.

D. Qualitative Analysis

Highlights

The Program launched on August 21, 2012 and features a state of the art recycling center in Charlotte. The Program's website is operational and can be viewed at http://www.duke-energy.com/south-carolina/savings/appliance-recycling.asp. Screen captures of the website are included in the Appendix-The Company selected JACO as the third party Program administrator by using a competitive bid process:

Key Activities

The Program was promoted through bill inserts, the Company's website digital media, mass media, and public relations.

The Program was approved by the Public Service Commission of South Carolina on May 9,2012 and North Carolina Utilities Commission on July 17, 2012. As a result of launching late in 2013, the participation for 2012 was lower than originally estimated for the year.

Appliance Recycling Program

E. Marketing Strategy

The marketing campaign incorporates the following three-pronged approach to reach customers and promote the Program:

Mass media/advertising

- Major TV broadcast media filmed and aired Program collection crews making home appliance pickups in both states.
- Public relations
 - The Company's Corporate Communications and Runyon, Saltzman & Einhorn JACO advertising agency – developed and released Program launch alerts to key media outlets in NC and SC.
 - Media was invited to the new Carolinas Recycle Center in Charlotte to view the recycling
 of the appliance picked up during the Program launch.
- Retail marketing/promotions.
 - o The Company and JACO are developing a retail program with one or more major appliance retailers to gauge customer acceptance of the channels

Program marketing channels include but not limited to:

- Bill Inserts
 - 34% of Carolinas customers surveyed indicated bill Inserts as "How they heard about the Program"
- State landing page promos on duke-energy;com
- · On Line Services web site promos
- · Press releases and press events
- Retail store point-of-sale
 - o Planned for 2013
- Newspaper ads and advertorials
- Residential opt-in email blasts
- Direct mail with refrigerator magnet
- Digital marketing
 - Web banner ads and internet radio

The marketing campaign accentuates the following key messages:

- An older, inefficient refrigerator or freezer typically consumes 1,500 kilowatt hours annually. A new Energy Star[®] rated unit typically consumes 400 to 500 kilowatt hours annually.
- Older refrigerators may use up to four times more electricity than newer Energy Star® rated
 units. Many second refrigerators are used only occasionally or are not full, wasting even more
 energy
- JACO will remove the old working unit and dispose of it in an environmentally safe way.
- Customers will receive an incentive for recycling an eligible appliance.

F. Measurement and Verification

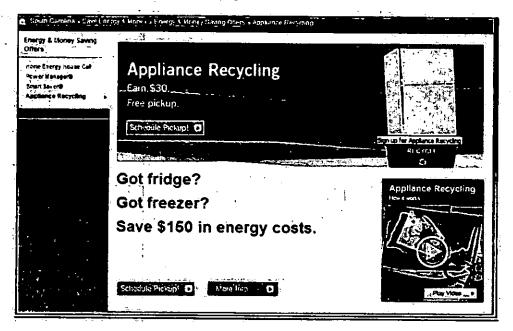
Process evaluations will began in December 2012 and continue through April 2013, which includes the development of the survey instruments for Program management and Program participants. Analysis and the final process report are anticipated for the third quarter of 2013.

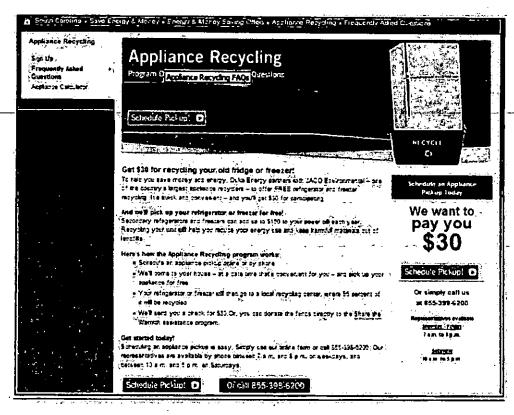
In response to information in the Order issued by the North Carolina Utilities Commission on July 17, 2012 for the Program, the impact evaluation plans are currently under revision to include a billing analysis in addition to the engineering analysis proposed. This requires an additional amount of pre- and post-installation before impacts can be assessed.

Appliance Recycling Program

G. Appendix

Appliance Recycling Program - web pages





Residential Neighborhood Program

A. Description

The Residential Neighborhood Program ("Program") assists low-income customers in reducing energy costs through energy education and by installing or providing energy efficient measures for each customer's residence. The primary goal of the Program is to empower low-income customers to better manage their energy usage.

Customers participating in the Program will receive an energy assessment to identify energy efficiency opportunities in the customer's home and one-on-one education on energy efficiency techniques and measures. Additionally, the customer receives a comprehensive package of energy efficient measures. Each measure listed below will be installed or provided to the extent the measure is identified as energy efficiency opportunity based on the results of the energy assessment.

- 1. Compact Fluorescent Bulbs Up to 15 compact fluorescent bulbs to replace incandescent bulbs.
- 2. Electric Water Heater Wrap and Insulation for Water Pipes.
- 3. Electric Water Heater Temperature Check and Adjustment.
- 4. Low-Flow Faucet Aerators Up to three low-flow faucet aerators.
- 5. Low-Flow Showerheads Up to two low-flow showerheads.
- 6. Wall Plate Thermometer.
- 7. HVAC Winterization Kits Up to three winterization HVAC kits for wall/window air conditioning units will be provided along with education on the proper use, installation and value of the winterization kit as a method of stopping air infiltration.
- 8. HVAC Filters A one-year supply of HVAC filters will be provided along with instructions on the proper method for installing a replacement filter.
- 9. Change Filter Calendar,
- 10. Air Infiltration Reduction Measures Weather stripping, door sweeps, caulk, foam sealant and clear patch tape will be installed to reduce or stop air infiltration around doors, windows, attic hatches and plumbing penetrations.

Audience

The Program is available to individually-metered residential customers in neighborhoods with approximately 50% of the homes identified as low income based on third party and census data, which includes income level and household size. Areas targeted for participation in the Program will typically have approximately 50% or more of the households with an income equal to or less than 200% of the poverty level established by the federal government.

B &C. Impacts, Participants and Expenses

Residential Neighborhood 22	1	5714 1 TO 1	
	Vintage 3	Vintage 3	% of
\$ in millions	As Filed	YTD Dec 31, 2012	Target
North Carolina Nominal Avoided Cost	*	\$0.0	
South Carolina Nominal Avoided Cost		\$0.0	. 15
Program Cost		\$0.1	
MW		0.0	
MWH		0.0	
Units ³	,	0	

Notes on Table:

1) Numbers rounded.:

2) There is no as-filed comparison for Residential Neighborhood because it was not included in the original filing.

Residential Neighborhood Program

The Program was approved by the Public Service Commission of South Carolina on May 9, 2012 and North Carolina Utilities Commission on June 29, 2112. The Program will launch in early 2013.

D. Qualitative Analysis

Highlights

Duke Energy Carolinas, LLC (the "Company") has selected GoodCents as the administrator for the Program and is currently preparing for the Program to launch early in the second quarter of 2013.

Issues

The Company and GoodCents will work together to ensure that the Program is launched in a sustainable manner and garners support with the community.

Potential Changes

There are currently no planned changes for the Program.

E. Marketing Strategy

The Company will target neighborhoods with a significant low-income customer base using a grassroots marketing approach to interact on an individual customer basis and gain trust. Participation is driven through a neighborhood kick-off event that includes trusted community leaders explaining the benefits of the Program. The purpose of the kick-off event is to rally the neighborhood around energy efficiency and to educate customers on methods to lower their energy bills. Customers will have the option to sign up for an energy assessment at the time of the event.

In addition to the kick-off event, the Company plans to use the following avenues to inform potential customers about the Program:

- Direct mail
- Door hangers-
- Press releases
- Community presentations and partnerships
- Inclusion in community publications such as newsletters, etc.

F. Measurement and Verification.

The evaluation activities of the Program are scheduled to begin in early 2013. Provided that the Program launches as planned, the process evaluation report will be completed in Quarter 4 of 2013. The impact analysis methodology will be determined in Q3 of 2013 leveraging the process evaluation work which will document the Program operations and measures.

A. Description

Power Manager® ("Program") is a demand response program that cycles residential central air conditioning usage during summer peak demand conditions. Duke Energy Carolinas, LLC (the "Company") installs a load cycling device to the outdoor unit of a qualifying air conditioner. This enables the customer's air conditioner to be cycled off and on when the load on the Company's system reaches peak levels in the summer. In addition, the Company can perform a full shed interruption of participating customers' air conditioning systems at any time due to capacity problems, including generation, transmission or distribution capacity problems or reactive power problems.

Program participants receive a financial incentive for participating in this program – an \$8 per month bill credit from July through October (\$32 annually).

The cycling of the customer's alr-conditioning system has shown that there is no adverse impact on the operation of the air-conditioning system. The load control device has built-in safe guards to prevent the "short cycling" of the air-conditioning system. The air-conditioning system will 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 from what it does on milder days. Additionally, the indoor fan will continue to run and circulate air during the cycling event.

Audience

This program is available to the Company's residential customers residing in owner-occupied, single-family residences with a qualifying outdoor central air-conditioning unit.

B.& C. Impacts, Participants and Expenses

North Carolina Pov	verManager 1			
	\$ in millions	Vintage 3 As Filed	Vintage 3 December 31, 2012	% of Target
North Carolina Non	ninal Avoided Cost	\$18.4	\$20.2	110%
Program Cost ²		\$6.4	\$12.6	198%
MW ³		244.4	266.5	109%
MWH		N/A	N/A	,
Units			186,090	

South Carolina PowerManager *

12-1		
Vintage 3	Vintage 3	% of
As Filed	June 30, 2012	Target
\$24.6	\$22.6	92%
\$14.5	\$12.6	87%
305.6	266.5	87%
N/A	N/A	7.5
	186,090	1 2
	As Filed \$24.6 \$14.5 305.6	As Filed June 30, 2012 \$24.6 \$22.6 \$14.5 \$12.6 305.6 266.5 N/A N/A

Notes on Tables:

- 1) Numbers rounded.
- 2) As filed program costs do not include M&V. Actual costs may include M&V.
- 3) MW capability derived by taking average over PowerManager contract period.

D. Qualitative Analysis

Power Manager® Events - 2012

There were five Power Manager® cycling events in the summer of 2012. The Company cycled customers air-conditioning units to shift demand and lower the afternoon peak on:

- June 29
- July 9, 17, 26 and 27

In addition to these cycling events, the Company conducted two successful tests on June 13 and 14 to assess the readiness of the Power Manager® systems. The first test ensured the Company's ability to initiate a full shed of air conditioning load. The following day's test verified that, if needed, the Company could shift to full shed while a cycling event is underway.

Power Manager® \$35 Installation Fee

The Public Service Commission of South Carolina and North Carolina Utilities Commission approved the Company's request to eliminate the \$35 installation fee for Program participants.

Power Manager® Recognized

Power Manager® was recognized with the Outstanding Achievement in Energy Efficiency Technology Deployment by the Association of Energy Services Professionals at their annual conference held in February 2012. Power Manager's ability to cycle air conditioners to achieve a targeted kilowatt (kW) load reduction was the basis of the award. Following is an excerpt from the award nomination (as submitted by Nick Hall of TecMarket Works). *Residential load control switches installed on air conditioners have typically not been capable of delivering load reductions from a large segment of participating customers who have air conditioners that perform within limited duty cycles. Customers with small homes or with over-sized AC units could easily recover from the programmed switch control cycle. This resulted in air conditioners that shifted their normal duty cycle to be synchronized with the switch control cycle but provided no reduction in actual load. The new switch requested by Duke was built by Cooper Power Systems to meet the higher performance needs of Duke's load control programs. The switch is self-calibrating to the condition of each home, and then self-formulates a control strategy for that individual home so that the level of contracted load is acquired regardless of the size of the unit or the conditions of the home. This represents a major breakthrough in load control switches to help assure that the load reduction is achieved from every customer rather than a sub-population of customers.

E. Marketing Strategy-

With the approval of the elimination of the \$35 installation fee, an email marketing approach was used for the first time. Power Manager® was the feature topic in the June residential email "Cool ideas for summer heat." In addition, this email included the debut of the new Power Manager® video. This offer was sent to over 150,000 Duke Energy Carolinas residential customers and resulted in a 38% response. This email represented a low acquisition cost approach and resulted in over 550 enrollments.

The Company plans to continue to use email and limited direct mail offers for its near-term Power Manager marketing, while focusing its technical resources on replacing older Power Manager devices. In 2012, over 45,000 of these older devices were removed from the program, with the majority of these being replaced with new equipment.

In 2012, the Company mailed postcards to a sample of South Carolina customers in advance of the replacement visit by our contractor GoodCents. Learnings showed that providing advance notice of the work

and legitimacy of GoodCents improved the customer's experience. Plus, it improves retention of customers on the Program. This approach has proven to be very successful and will be moved from the pilot stage to full implementation in both North Carolina and South Carolina in 2013.

Program information, such as the online enrollment form and the new video, is available to customers on the Program's website located at http://www.duke-energy.com/north-carolina/savings/power-manager.asp.

F. Evaluation, Measurement and Verification

The impact evaluation for the 2011 Power Manager® program was finalized on September 7, 2012. This information was shared with the Company's Collaborative in December 2012.

The impact evaluation developed an air conditioning duty cycle model for each air-conditioning unit based on information from a sample of Power Manager® participants in the Company's system. This duty cycle was if then used to simulate the expected natural duty cycle for load control technologies under two different conditions: 1) during the Power Manager® event days, and 2) under peak normal weather conditions. The results of these simulations were used to produce estimates of the potential load reduction. These estimates were then de-rated by the results of various operability studies to give estimates of the realized load reductions. Table 1 below summarizes the resulting estimated actual and the peak normal weather load impacts at the switch level for the Company's customers.

Table 1. Carolinas System Load Impacts per Switch Adjusted for Line Losses

Control Strategy	2011 impacts	Peak Normal Weather Impacts
Target Cycle (TC) 1.3 and Fixed Cycle	0.64	0.69
Full Cycle	0.95	1.19

The approach used by the Company's staff is nearly identical to the approach used in the prior evaluations reviewed by the TecMarket team:

Noteworthy additions include:

- The discovery that many Cannon switches deviate substantially from the shed times expected for the Target Cycle method, shedding more like an "inverted" pattern. This results in a significant difference between the expected Target Cycle shed and the actual shed. The reported estimated impacts incorporate this inverted shed.
- It appears that the peak normal impacts now include an adjustment for line losses. This is a commendable approach and is rarely done in other evaluations.

A full process evaluation was not conducted for this Program in 2012. However, the findings of customer surveys completed after specific event days will be presented during the June 2013 Company's Collaborative meeting. These surveys covered customer experiences with the Program as it relates to event days in 2012.

The impacts evaluation from the economic events in the summer of 2012 is scheduled to be completed in Q2 of 2013.

G. Appendix

2012 Seasonal Reminder Postcard

Power Manager

Thank you for taking part in Power Manager – a voluntary program that pays you for allowing Duke Energy to cycle off your air conditioner as electricity demand approaches peak levels.

As a Power Manager participant, you receive an \$8 credit on your electricity bill each month from July through October – that's \$32 a year! Plus, your commitment helps preserve the environment and keep electric rates lower throughout our service area in the Carolina's.

Last summer, our Power Manager customers in the Carolinas combined to reduce electricity demand by an average of 110 magawaxts during each cycling event. That's the equivalent of the energy needs of nearly 37,000 homes during those peak periods.

Questions:

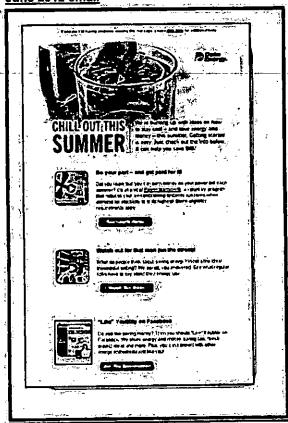
Visit Duke-Energy.com/Power-Manager

or call 800-777-9898 for more information.

Event Hotline: Call 600-832-3169 to see if a cycling event is underway.

nawsers:

June 2012 email



Duff Exhibit 7

Duke Energy Carolinas Program Modifications - January 1, 2012 - December 31, 2012 Docket Number E-7 Sub 1031

	<u> </u>				, i a (ost Effe	tivene	ss Scores 🚁
Program Name	Program Description	在海州市外外	Type of Change 🔏 🚈	Status of Change	UCT	¥TRC∰	RIM	Participant :
•	The Company filed, in Docket No. E-7, Sub 83	1 on March 15, 2012,						•
	the revised Program tariff reflecting the remo	val of the \$35		ļ				
Power Manager	installation fee.	· ·	Participation	Implemented	4.46	85.67	4.46	•
	The Company filed, in Docket No. E-7 Sub 83	1 on February 22,						
Residential Smart \$aver	2012, an application requesting approval to a	dd tune and seal						
Program	measures to this program.		Measure Additions	implemented .	.2.25	1.91	0.76	4.37
	The Company filed the Advance Notice Progr	m Modifications						
	Reporting Template, in Docket No., E-7, Sub 8	31 on October 15,		,				
Residential Smart \$aver	2012, which reflects the addition of specialty	bulbs to the				•		
Program 1	Residential Smart \$aver Program.		Measure Additions	Implemented	1.54	1.52	0.66	3.98
i		•						
.	The Company filed the Advance Notice Progr	am Modifications						
, ,	Reporting Template, in Docket No. E-7, Sub 8	31 on October 15,	. '					
Non-Residential Smart	2012, which reflects the removal and addition	of measures to the	Measure Additions				,	'
\$aver ¹	Non-Residential Smart Saver Program.		and Removals	Implemented	4.54	1.97	1.40	2.36

¹Program changes submitted in compliance with the Flexibility Guidelines approved by the North Carolinas Utilities Commission in Docket No. E 7, Sub 831 on July 16, 2012. The cost-effectiveness results reflect one year of program operations.

Duke Energy Carolines

Changes to DSM/EE Cost Recovery Vintage 3 Trum Up January 1, 2012 - December 91, 2012
Changes from Prior Filing Due to Application of MBV and Participation

System LWR and LW Impacts Net Free Edies at the Plant

Profesional Programs

					i					Variance due to Change	in impacts	Varience due te	Change in		
	Flied in Decket 6-		. Flied in Dechet E-7, 1		Oversit Varia	NACE .	E-7 Sub 979	E-7 Sub 1031	Defts	and Measure A	4lx	Participa	tien	Sum of Vari	innos
Program Name	<u>kWh</u>	kW	<u>k</u> wh	kW	l kwh	rw .	System Par	ticipation .	Participation	kWh	kW	twh.	- KW	kWh	LW .
Appliance Recycling	•	•	1,971,543	366	1,971,543	366		1,990	1,990		-	1,971,543	366	1,971,543	366
Residential Energy Assessments	7,711,468	1,150	9,499,733	1,376	1,783,265	218	15,730	27,734	12,004	{4,096,570}	(644)	5,884,835	234	1,788,265	218
Smart Saver® for Residential Customers	72,643,937	8,057	224,983,046	24,409	153,139,109	16,352	1,458,273	5,254,957	4,396,684	(63,469,913)	(7,940)	216,609,022	24,292	153,139,109	16,352
Low Income Energy Efficiency and Weatherization Assistance	447,655	58			(447,655)	(58)	400		(400)		•	(447,655)	(54)	[447,655]	(54)
Energy Efficiency Education Program for Schools	6,353,960	1,179	8,963,453	1,663	2,608,493	484	26,000	40,485	14,445	(930,396)	(173)	3,539,889	657	2,609,493	484
Residential Retrofit Pilot	2,332,600	938	283,678	47	(2,049,122)	(891)	1,000	65	(1,015)	143,278	(9)	(2,192,400)	(882)	(2,045,122)	(#91)
Horne Energy Comperison Report	_ '	-	49,339,464	10,461	49,339,464	10,461		702,215	702,215			49,339,464	10,461	49,339,464	10,461
PowerMenager		333,879		268,706		(65, 173)	221,373	186,090	(35,203)		(11.958)	-	(53,214)	10,000,101	(65,173)
Residential Programs Total	811,689,820	345,269	295,040,918	307,028	206,351,098	{33,241}	1,722,856	6,813,536	5,090,680	(68,353,001)	(20,746)	274,704,699	(17,495)	206,351,098	(38,241)
									1 2				,,,,,,,,		-5,242

on-Registeralal Programs

	Filed in Docket E	-7, Sub 979	Filed in Docket E-7, 1	Nub 1091	i Overali Var	rlence	E-7 Sub 979	E-7 Sub 1051	Delta	Verlance due to Change and Measure le		Verience due te : Ferticipati		Sum of Varie	unras
Program Name	kws	· kW	kWh	kW	kWh	kw	System Par	ticipation	Participation	kWh	- w	kWh	kW	kWh	kw
Smort Sever® for Non-Residential Customers Lighting	43,011,995	8,791	68,918,024	12,076	25,906,029	3,285	225,004	261,016	36,812	18,869,009	1,847	7,017,020	1,430	25,906,029	3,285
Smart Saver® for Non-Residential Customers Motors	2,698,447	519	ı 5,967,650	1,132	3,269,203	613	1,656	5,141	1,485	(2,405,594)	(479)	5,678,797	1.092	3,269,203	613
Smart Saver* for Non-Residential Customers - Other Prescriptive	15,945	1			(15,945)	(3)	109		(109)			(15.945)	(3)	(15,945)	133
Smart Savar* for Non-Residential Customers - Energy Star Food Service Products	757,990	135	1,950,854	366	1,197,864	. 230	258	1,389	1,331	{2,717,542}	44711	3,910,406	702	1.192.864	230
Smart Saver® for Non-Residential Customers - HVAC	4,745,056	1,398	4,120,481	1,716	(624,575)	310	39,341	69,604	30,263	(4,274,702)	(758)	3,650,127	1.075	(624,575)	318
Smert Saver® for Non-Residential Customers - Custom Rebete	17,565,577	2,799	113,380,706	15,371	95,815,129	12,572	1,510	67,339	65,821	(665,634,306)	(108.794)	761,649,436	121,366	95.815.129	12,572
Smart Energy Now	•		4,127,229	775	4,127,229	775		34	34			4,127,229	775	4.127.229	775
PowerShare		320,688		376,736		55,048	297	171	[126]		192,206		(136,157)	·	56.048
Non-Residential Progresse Tutal	68,795,010	334,334	198,464,543	408,172	129,669,933	73,838	264,110	405,694	137,511	(656,367,135)	\$3,550	786,017,069	(9.712)	129,669,933	73,634
			-											. ,	
Total Residential and Non-Residential Programs	157,484,830	679,603	493,505,862	715,200	335,021,032	35,597	1,991,039	7,219,230	5,228,191	(724,720,736)	62,805	1,050,741,767	(27,208)	\$36,021,032	35,597

NOTE - The actual per unit impacts are reflective of the following EMSV reserts:

Program Name As Filed	Decket	Report Reference	į	Effective Date
Residential Energy Assessments	E-7, Sub 1001	Enhibit AT Carolines PER and OHEC - Final Impact Eva	Justion Report - Nov 15 2011 add	W1/2009
		Ethibit C: Carollant HEHC Final Process and Impact		1/1/2009
Smart Saver® for Residential Customers	E-7, Sub 1001	Exhibit F - Carolinas - Smart Saver CFL - Final Process a	nd Impact Evaluation Report - Revised April 26 2011.pdf	6/1/2009
		Exhibit D - Carolinas - Residential Smart Saver HVAC - F	Inal impact Evaluation Report - Jan 27 2012 pdf	6/1/2009
	E-7, Sub 1031	Rider 5 - Exhibit F - Residential Smart Saver CFL Proces	a and Impacts.pdf	3/1/2012
Low income Energy Efficiency and WeatherIzation Assistance	E-7, Sub 1001	Exhibit N - Low Income Program Freeridership - Memo	1 UV 11 201 (pdf) 1	50 F 1 . 6 7(V1/2009)
Energy Efficiency Education Program for Schools	E-7, Sub 1001	Exhibit D Carolines • K12 - Final Impact Process Evaluat		6/1/2009
Smart Saver for Non-Residential Customers Lighting	E-7, Sub 1001	Exhibit K. Carolmas Non Res Smart Saver Prescriptive	Final Process and Impact Evaluation Report - revised June 16 2011 pdf	6/1/2009
		Exhibit P. Carolina : Evaluated Savings for 3 Lamp His	h Bay Finture - Memo - Dec 29 2011 pdf	5 (V1/2002)
Smart Saver® for Non-Residential Customers Motors	E-7, Sub 1001	Exhibit K - Carolinus - Non Res Smart Saver Prescriptive	r - Final Process and Impact Evaluation Report - revised June 16 2011.pdf	6/1/2009
		Exhibit Q - Cerolinas - Non-Residential Smart Saver - Vi		1/1/2011
Arrari Saver for Hon-Residential Customers - Other Prescriptive	E-Z, \$10, 1001	Exhibit L. Carolinus: Non Aes Smart Saver Prescriptive	2 Final Process and Impact Evaluation Report Envired June 16 2015 and 2015	6/1/2009
Smart Sever* for Non-Residential Customers - Energy Star Food Service Product	€-7, Sub 1001		- Final Process and Impact Evaluation Report - revised June 16 2011 pdf	£/1/2009
Smart Saver For Non-Residential Customers : HVAC	£-7, Sub 1001 #	Ethibit 4 - Carolinas - Non Res Smart Saves Franciscing	Finel Process and Impact Evaluation Report : revised Augu 16 2011 pdf	· . / · 6/1/2009

DUFF EXHIBIT 9 CONFIDENTIAL

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 1031

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

- 1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- 2 A. My name is Kimberly D. McGee, and my business address is 526 South Church
- 3 Street, Charlotte, North Carolina.
- 4 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
- 5 A. I am a Rates Manager for Duke Energy Carolinas, LLC ("Duke Energy
- 6 Carolinas" or the "Company").
- 7 Q. PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL
- 8 QUALIFICATIONS.
- 9 A. I graduated from the University of North Carolina at Charlotte with a Bachelor of
- Science in Accountancy. I am a certified public accountant licensed in the State
- of North Carolina. I began my career in 1989 with Deloitte and Touche as a staff
- auditor. In 1992, I began working with Duke Power Company (now known as
- Duke Energy Carolinas) as a staff accountant and have held a variety of positions
- in the finance organization. From 1997 until 2009, I worked for Wachovia Bank
- 15 (now known as Wells Fargo) in a variety of finance and regulatory positions. I
- rejoined Duke Energy Carolinas in January 2009 as a Lead Accountant in
- Financial Reporting. I joined the Rates Department in 2011 as Manager, Rates
- 18 and Regulatory Filings.
- 19 Q. WHAT ARE YOUR PRESENT RESPONSIBILITIES AT DUKE ENERGY
- 20 CAROLINAS?
- 21 A. I am responsible for providing regulatory support for retail and wholesale rates,
- 22 providing guidance on Duke Energy Carolinas' energy efficiency cost recovery
- process.

1 Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

2 A. No, I have not testified before this Commission.

3 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS

4 **PROCEEDING?**

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

A. My testimony supports Duke Energy Carolinas' Application for approval of its demand-side management ("DSM") and energy efficiency ("EE") cost recovery rider, Rider EE, for 2014 ("Rider 5"). Rider 5 incorporates the second year of net lost revenues for Vintage 4 of the Company's EE programs and the third year of net lost revenues for participants in the Vintage 3 EE programs during July through December 2012. Rider 5 also includes a true-up for Vintage 3 DSM and EE programs as well as adjustments to prior true-ups for Vintages 1 and 2. In addition, as the save-a-watt pilot approved in Docket No. E-7, Sub 831 expires at the end of 2013, the Company has filed for approval of a new portfolio of DSM and EE programs and a new cost recovery mechanism to replace save-a-watt in Docket No. E-7, Sub 1032, to become effective January 1, 2014. Accordingly, Rider 5 includes the recovery of estimated costs and net lost revenues associated with year one of Vintage 2014 of the new portfolio, as well as an incentive calculated pursuant to the new mechanism. In my testimony, I discuss the key concepts and attributes of the save-a-watt pilot program proposed in Rider 5, as well as the mechanics and calculations that are incorporated within Rider 5. The mechanics and calculations of the recovery of estimated costs associated with year one of Vintage 2014 of the new portfolio will be discussed in detail in the

- 1 testimonies of Company Witnesses Jane L. McManeus and Timothy J. Duff in
- 2 Docket No. E-7, Sub 1032.
- 3 Q. PLEASE DESCRIBE THE EXHIBITS ATTACHED TO YOUR
- 4 TESTIMONY.
- 5 A. McGee Exhibit 1 summarizes the individual rider components for which the
- 6 Company is requesting approval in this filing. As discussed above, Rider 5
- 7 includes amounts related to all four vintages of the save-a-watt pilot and year one
- 8 of Vintage 2014 of the new portfolio. McGee Exhibit 2 shows calculations of
- 9 rates separately by vintage and separately for EE programs and DSM programs.
- McGee Exhibit 3 shows the amounts that have been collected from customers
- through EE riders 1, 2 and 3 related to Vintages 1, 2 and 3, the three vintages for
- which a true-up calculation is performed in this filing. McGee Exhibit 4 presents
- the forecasted sales for the rate period (2014) and the estimated sales related to
- 14 customers that have opted out of various vintages. These amounts are used to
- determine the forecasted sales to which the Rider 5 amounts will apply. McGee
- 16 Exhibit 5 shows the allocation factors used to allocate system EE and DSM costs
- to North Carolina retail jurisdiction. McGee Exhibit 6 presents the true-up
- 18 calculation for the Residential Energy Assessment: Personalized Energy
- 19 Report/Online Audit ("PER") program overstatement correction estimate filed in
- 20 Rider 4. McGee Exhibit 7 is the proposed tariff sheet for Rider 5.
- 21 Q. WERE MCGEE EXHIBITS 1-7 PREPARED BY YOU OR AT YOUR
- 22 DIRECTION AND SUPERVISION?
- 23 A. Yes, they were.

I. <u>SAVE-A-WATT PILOT</u>

1

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

Α.

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

In accordance with the modified save-a-watt compensation mechanism described in the Agreement and Joint Stipulation of Settlement between Duke Energy Carolinas, the Public Staff, Southern Alliance for Clean Energy ("SACE"), Environmental Defense Fund, Natural Resources Defense Council, and the Southern Environmental Law Center filed June 12, 2009 in Docket No. E-7, Sub 831 ("Stipulation") and approved in the Commission's Order Approving Agreement and Joint Stipulation of Settlement Subject to Certain Commission-Required Modifications and Decisions on Contested Issues issued February 9, 2010 ("Order"), Rider EE is designed to allow Duke Energy Carolinas to collect a level of revenue equal to 75% of its estimated avoided capacity costs applicable to DSM programs and 50% of the net present value ("NPV") of estimated avoided capacity and energy costs applicable to EE programs, and to recover net lost revenues for EE programs only. Revenues collected under Rider EE are based on the expected avoided costs and the associated net lost revenues to be realized at an 85% level of achievement of the Company's avoided cost savings target for the applicable vintage per the Stipulation.

Billing factors for Rider EE are calculated separately for residential and non-residential customers. The residential charge is calculated based on the avoided costs of programs targeted to residential customers; the non-residential

charge is calculated based on the avoided costs of programs targeted to non-residential customers.

The recovery mechanism employs a vintage year concept, and there are four calendar year vintages during the limited term of the modified save-a-watt pilot. The recovery includes annual net lost revenues associated with each vintage of EE programs for a three-year period; therefore, the recovery of net lost revenues applicable to EE programs for vintage years three and four will extend one year and two years beyond the initial four-year cost recovery period, respectively, unless terminated or adjusted by another regulatory action.

The Stipulation provides for a series of vintage true-ups, or Experience Modification Factors ("EMF"), that will be conducted to update revenue requirements, including net lost revenues, based on actual customer participation results for each vintage. EM&V results are applied during vintage true-ups in accordance with the Evaluation, Measurement and Verification ("EM&V") agreement reached by the Company, SACE and the Public Staff and approved by the Commission in its *Order Approving DSM/EE Rider and Requiring Filing of Proposed Customer Notice* issued November 8, 2011 in Docket No. E-7, Sub 979 ("EM&V Agreement"). The true-ups for each vintage will also incorporate the difference between 1) the revenues collected based on billings at 85% of targeted savings, which in turn are established based upon estimated participation levels and initial assumptions of load impacts; and 2) the amount of revenues that the Company is permitted to collect under the Stipulation based on actual participation levels and load impacts. The vintage true-ups will also provide the

opportunity to recover the cost of pilot programs or new programs introduced during a vintage year.

Α.

After the end of the four-year modified save-a-watt pilot, the Company will perform a final true-up process. This process will include a final comparison of the revenues collected from customers through the Rider EE to the amount of revenue the Company is authorized to collect from customers based on the independently measured and verified results as described in the Stipulation. Any difference will be flowed through to customers or will be collected from customers, as the case may be. If there are amounts owed to customers, such amounts will be refunded with interest.

The final true-up process will also include calculations that determine the earnings for the entire program and ensure that the level of compensation recovered by the Company is capped so that the after-tax rate of return on actual program costs applicable to EE and DSM programs does not exceed the predetermined earnings cap levels set out in the Stipulation. Any excess earnings collected from customers will be refunded to customers with interest. The interest rate on any over-collection will be at a rate to be determined by the Commission in the first true-up proceeding in which an over-collection occurs.

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

In its Order Granting Waiver, in Part, and Denying Waiver, in Part ("Waiver Order") issued April 6, 2010 in Docket No. E-7, Sub 938, the Commission approved, in part, Duke Energy Carolinas' request for waiver of Commission

Rule R8-69(d)(3), thereby allowing the Company to permit qualifying non-residential customers¹ to opt out of the DSM and/or EE portion of Rider EE during annual election periods. If a customer opts into a DSM program (or never opted out), it is required to participate for three years in the approved save-a-watt DSM programs and rider. If a customer chooses to participate in an EE program (or never opted out), that customer is required to pay the EE-related avoided cost revenue requirements and the net lost revenues for the corresponding vintage of the programs in which it participated. Customers that opt out of the Company's DSM and/or EE programs would remain opted-out for the term of the save-a-watt pilot, unless they choose to opt back in during any of the succeeding annual election periods, which occur from November 1 to December 31 each year. If a customer participates in any vintage of programs, the customer is subject to all true-up provisions of the approved Rider EE for any vintage in which the customer participates.

Q. WHAT ARE THE SAVE-A-WATT PILOT COMPONENTS OF RIDER 5?

A. The proposed Rider 5 consists of four distinct components related to the save-awatt pilot: (1) a prospective Vintage 4 (2013) component designed to collect the second year of estimated net lost revenues for the Company's fourth vintage of EE programs; (2) a prospective Vintage 3 (2012) component to recover the July through December portion of the third year of estimated net lost revenues for the Company's third vintage of EE programs; (3) an EMF component which consists

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

of the true-up of participation for Vintage 3 (2012); and (4) an adjustment to previous EMF components. The adjustment to previous EMF components consists of four adjustments to the previous participation true-ups for Vintage 1 (2009/2010) and Vintage 2 (2011) as follows: (a) a true-up to actual of the savings estimate related to the PER program overstatement as discussed in the Supplemental Testimony of Jane L. McManeus ("McManeus Supplemental") filed in Docket No. E-7, Sub 1001; (b) inclusion of the My Home Energy Report program ("MyHER") approved in Docket No. E-7, Sub 1015, avoided costs and net lost revenue impacts retroactively applied back to January 2010; (c) true-up of lost revenues due to a change in the variable O&M adjustment to the lost revenue rates; and (d) the true-up of estimated revenue collected by Rider 3 in 2012 to actual collections. These adjustments will be discussed in more detail later in my testimony.

Q. WHAT IS THE RATE PERIOD FOR THE PROSPECTIVE VINTAGE 4 AND VINTAGE 3 COMPONENTS OF RIDER 5? A. In accordance with the Commission's Order on Motions for Reconsideration

issued on June 3, 2010 in Docket No. E-7, Sub 938 ("Second Waiver Order"), the
Company has calculated the prospective Vintage 4 and Vintage 3 estimated net
lost revenues components of Rider 5 using the rate period January 1, 2014
through December 31, 2014.

8 Q. WHAT IS THE TEST PERIOD FOR THE EMF COMPONENT?

9

10

11

12

13

14

15

16

17

20

21

22

23

Α.

A.

Pursuant to the Second Waiver Order, the "test period," for purposes of the modified save-a-watt portfolio of programs, is defined as the most recently completed vintage year at the time of the Company's Rider EE cost recovery application filing date, which in this case is Vintage 3 (January 1, 2012 through December 31, 2012). In addition, the Second Waiver Order allows the EMF to cover multiple test periods. Accordingly, the test period for the EMF related to Vintage 2 is January 1, 2011 through December 31, 2011 and the test period for the EMF related to Vintage 1 is June 1, 2009 through December 31, 2010.

RIDER 5 PROSPECTIVE COMPONENTS

Q. WILL YOU PLEASE DESCRIBE THE BASIS FOR THE RATE PERIOD REVENUE REQUIREMENTS?

The estimated revenue requirements for Vintage 4 (2013) and Vintage 3 (2012) are determined separately for residential and non-residential customer classes and are based on the second year and third year (2014), respectively, of net lost revenues to be realized at an 85% level of achievement of targeted savings. The

1 Company has approval to recover three years of lost revenues for each vintage of 2 EE programs. As a result, the revenue requirements for the Vintage 4 and 3 Vintage 3 component of proposed Rider 5 include an estimate of the second year 4 for Vintage 4 of net lost revenues for EE programs and the third year of net lost 5 revenues for participants in the EE programs during July through December 2012. 6 Q. HOW ARE REVENUE REQUIREMENTS FOR THE PROSPECTIVE 7 COMPONENTS ALLOCATED TO THE NORTH CAROLINA RETAIL 8 JURISDICTION THE NON-AND TO RESIDENTIAL AND 9 RESIDENTIAL RATE CLASSES? 10 A. The revenue requirements for EE programs targeted at retail residential customers across North Carolina and South Carolina are allocated to North Carolina retail 11 12 jurisdiction based on the ratio of North Carolina retail kWh sales to total retail 13 kWh sales, and then recovered only from North Carolina residential customers. 14 The revenue requirements for EE programs targeted at retail non-residential 15 customers across North Carolina and South Carolina are allocated to North 16 Carolina retail jurisdiction based on the ratio of North Carolina retail kWh sales to 17 total retail kWh sales, and then recovered from only North Carolina retail non-18 residential customers. Consistent with the Commission's prior order, no costs will be allocated to wholesale jurisdiction. McGee Exhibit 5 illustrates the 19 allocations described above. 20 21 HOW ARE THE BILLING FACTORS FOR THE PROSPECTIVE Q. COMPONENTS OF RIDER 5 CALCULATED? 22

1 A. Billing factors are computed by dividing the revenue requirements for each 2 customer class, residential and non-residential, by the forecasted sales for the rate 3 period for the customer class. For non-residential rates, the forecasted sales 4 exclude the estimated sales to customers who have elected to opt out of paying 5 Rider EE. Because non-residential customers are allowed to opt out of either 6 DSM or EE programs separately in an annual election, non-residential billing 7 factors have been separately computed for DSM versus EE programs and within 8 EE programs, by vintage.

9 Q. HOW WERE THE NET LOST REVENUES INCLUDED IN RIDER 5 10 DETERMINED?

11

12

13

14

15

16

17

18

19

20

21

22

Α.

Lost revenues were estimated by multiplying the portion of the Company's tariff rates that represent the recovery of fixed costs by the North Carolina retail kW and kWh reductions applicable to EE programs. The Company calculated the portion of North Carolina retail tariff rates (including riders) representing the recovery of fixed costs by deducting the recovery of fuel and variable O&M costs from its tariff rates. The lost revenues totals for residential and non-residential were reduced by North Carolina retail found revenues computed using the weighted average lost revenue rates for each customer class. The testimony and exhibits of Company Witness Timothy Duff provide information on the actual and estimated found revenues which offset lost revenues. Pursuant to the Stipulation and Order, the Company is not requesting net lost revenue recovery for its DSM measures.

- 1 Q. HAS THE METHOD OF CALCULATING VARIABLE O&M
- 2 ADJUSTMENTS USED IN PREVIOUS RIDER EE FILINGS BEEN
- 3 AMENDED IN THIS FILING?
- 4 A. Yes. The variable O&M adjustments that were used in the calculation of the lost 5 revenue rates in previous Rider EE filings were based on the most recent cost of 6 service study at the time of the vintage (i.e., the variable O&M rates for Vintage 1 7 were based on the 2009 Cost of Service Study for the computation of rates for the period June 2009 through December 2009 and the 2010 Cost of Service Study for 8 9 the period January 2010 through December 2010). Since the lost revenues rates 10 are computed by deducting the recovery of fuel and variable O&M costs from the 11 Company's tariff rates, it seemed more accurate to use the same cost of service 12 study as that used in the calculation of the tariff rates. Thus, for Rider 5, both the 13 tariff rates and the variable O&M costs are based on the same cost of service 14 study (i.e., June 2009 through December 2009 lost revenue rates are computed 15 using the tariff rates in effect during that time period and removing the variable 16 O&M costs, both of which are based on the 2006 Cost of Service Study). The 17 adjustment to variable O&M results in a decrease to customers' rates.
- 18 Q. PLEASE DESCRIBE THE NET LOST REVENUES FOR WHICH THE
 19 COMPANY IS REQUESTING RECOVERY IN THE PROSPECTIVE
 20 COMPONENTS OF RIDER 5.
- 21 A. The Stipulation allows the Company to recover net lost revenues associated with a
 22 particular vintage for a maximum of three years, and provides that the recovery of
 23 net lost revenues shall cease upon the implementation of new rates in a general

rate case to the extent that the new rates are set to recover net lost revenues. Rider 5 incorporates net lost revenues for Vintages 3 and 4 in the following manner:

A.

- Vintage 3 The Company has included an estimate of 12 months of net lost revenues for year three (2014) of Vintage 3 for July through December 2012 participants in the prospective component of Rider 5. The amount is based on estimated North Carolina retail kW and kWh reductions and the Company's most recently approved tariff rates resulting from its 2011 general rate case, which became effective February 1, 2012. Because part of Vintage 3 overlaps with the 2012 portion of the test period for Duke Energy Carolinas' rate case pending in Docket No. E-7, Sub 1026, the net lost revenues for January 1, 2012 through June 30, 2012 will be captured in the new rates assumed to be effective October 1, 2013, and therefore are not included in proposed Rider 5.
- Vintage 4 The Company has included an estimate of net lost revenues for year two (2014) of Vintage 4 in the prospective component of Rider 5. The amount is based on estimated North Carolina retail kW and kWh reductions and the Company's most recently approved rates resulting from its 2011 general rate case, which became effective February 1, 2012.

18 Q. ARE THE PROSPECTIVE COMPONENTS OF RIDER 5 ADJUSTED 19 FOR THE IMPACT OF "OPT-OUT" CUSTOMERS?

Yes. Since the revenue requirements will not be recovered from non-residential customers that opt out of the Company's programs, the forecasted sales used to compute the rate per kWh for non-residential rates exclude sales of customers that have opted out of the vintage to which the rate applies.

1	Q.	WHAT ARE THE COMPANY'S PROPOSED	INITIAL	BILLING
2		FACTORS APPLICABLE TO NORTH CAROLIN	A JURISD	ICTIONAL
3		ELECTRIC CUSTOMERS FOR THE PROSPECTIV	Е СОМРО	NENTS OF
4		RIDER 5?		
5	A.	The Company's proposed initial billing factor for t	he Rider 5	prospective
6		components of the save-a-watt pilot is 0.0269 cents pe	r kWh for I	Ouke Energy
7		Carolinas' North Carolina retail residential customer	s. For no	n-residential
8		customers, the amounts differ depending upon customer	elections of p	participation.
9		The following chart depicts the options and rider amounts	s:	
10		Non-Residential Billing Factors for Rider 5	 	
11		Prospective Components	¢/kWh	
••		Vintage 3 EE participant	0.0071	

Vintage 4 EE participant 0.0107

These billing factors were determined based on jurisdictional revenue requirement levels that reflect the recovery net lost revenues for EE, calculated in accordance with the provisions of the Stipulation as explained earlier in this testimony. In addition, the revenue requirement levels included in the billing factors are based on 85% achievement of target savings.

TRUE-UP (EMF) COMPONENTS

WHAT IS BEING "TRUED-UP" FOR VINTAGE 3? 20 Q.

12

13

14

15

16

17

18

19

21

22

23

A.

The chart below demonstrates which components of the Vintage 3 estimate filed in 2011 that the Company is "truing up" in the Vintage 3 EMF component of Rider 5. McGee Exhibit 2, pages 3 and 5 contain the calculation of the true-up for

Vintage 3. The second year of net lost revenues for Vintage 3, which are a component of Rider 4 billings during 2013, will be trued-up to actual amounts during the next rider filing, when other components of Rider 4 are trued-up.

	V3 Estimate (2012) As Filed (Filed 2011)	V3 True Up (2014) (Filed March 2013)
	Rider 3	Rider 5 EMF
Avoided Costs	As filed Avoided Cost Rates from	As filed Avoided Cost Rates from
	Docket No. E-7, Sub 106	Docket No. E-7, Sub 106
Lost Revenues	Estimated participation assuming	Update for actual participation for
I	1/1/12 sign up date	July-December 2012 and actual 2012
!		rates
Participation	Estimated participation assuming	Update for actual participation for
	1/1/12 sign up date	July-December 2012
Found	Estimated according to Commission-	Update for actual according to
Revenues	approved guidelines	Commission-approved guidelines
M&V	Initial assumptions of load impacts	Updated according to Commission-
<u></u>		approved EM&V Agreement
New Programs	Only includes programs approved	Update for any new programs and
	prior to estimated filing	pilots approved and implemented
		since estimated filing

4 Q. WHY ARE THE AVOIDED COSTS RATES UNCHANGED?

5 A. The Company's combined avoided energy and capacity costs have not increased or decreased more than 25% from those fixed at the outset of the Stipulation.

7 Q. HOW WERE THE LOAD IMPACTS UPDATED?

- A. For DSM programs, the contracted amounts of kW reduction capability from participants are considered to be components of actual participation. As a result, the Vintage 3 true-up reflects the actual quantity of demand reduction capability for the Vintage 3 period. The load impacts for EE programs were updated in accordance with the Commission-approved EM&V Agreement.
- 13 Q. HOW WERE ACTUAL NET LOST REVENUES COMPUTED FOR THE
- 14 VINTAGE 3 TRUE-UP?

1 A. Net lost revenues for year one (2012) of Vintage 3 were calculated using actual 2 kW and kWh savings by North Carolina retail participants by customer class, 3 based on actual participation and load impacts reflecting EM&V results applied 4 according to the EM&V Agreement. The actual kW and kWh savings were as 5 experienced during the period July 1, 2012 through December 31, 2012. 6 Participation savings for the period January 1, 2012 through June 30, 2012 were 7 part of the test period of the pending Duke Energy Carolinas rate case and will be 8 recovered in base rates anticipated to become effective October 1, 2013. The 9 rates applied to the kW and kWh savings are the rates that were in effect for the 10 period January 1, 2012 through December 31, 2012. These tariff rates have been 11 reduced by the fuel and variable O&M costs. The lost revenues were then offset 12 by actual found revenues for year one of Vintage 3 as explained by Company 13 Witness Duff. The calculation of net lost revenues was performed by rate 14 schedule within the residential and non-residential customer classes.

Q. WHAT ARE THE COMPANY'S PROPOSED EMF BILLING FACTORS
APPLICABLE TO NORTH CAROLINA JURISDICTIONAL ELECTRIC
CUSTOMERS FOR THE VINTAGE 3 TRUE-UP COMPONENT OF
RIDER 5?

15

16

17

18

19

20

21

. 22

23

A.

The Company's proposed EMF billing factor for the Vintage 3 true-up component of Rider 5 is 0.0800 cents per kWh for Duke Energy Carolinas' North Carolina retail residential customers. For non-residential customers, the amounts differ depending upon customer elections of participation. The following chart depicts the options and rider amounts:

2	Non-Residential Billing Factors EMF Component (Vintage 3 True-up)	¢/kWh
2	Vintage 3 EE participant	0.0719
3	Vintage 3 DSM participant	(0.0071)
4		

5

7

8

9

11

12

13

14

17

18

19

20

21

22

23

A.

ADJUSTMENT TO VINTAGE 2 TRUE-UP

6 Q. WHAT ADJUSTMENTS HAVE BEEN MADE RELATIVE TO THE

PREVIOUS PARTICIPATION TRUE-UP FOR VINTAGE 2?

A. Rider 5 includes four adjustments to the previous participation true-up for Vintage 2 (2011): (a) a true-up to actual of the estimated savings related to the PER

program as stated in McManeus' Rider 4 Supplemental Testimony; (b) inclusion

of MyHER avoided costs and net lost revenues impacts applied back to January

2011; (c) true-up of lost revenues due to a change in the variable O&M

adjustment to the lost revenue rates as previously discussed; and (d) the true-up of

revenue collected by Rider 3 in 2012 to actual collections.

15 Q. PLEASE DESCRIBE THE ADJUSTMENT TO THE VINTAGE 2 TRUE16 UP RELATING TO PER.

In McManeus' Rider 4 Supplemental Testimony, Witness McManeus discusses an error that was discovered in the kWh/year savings associated with Duke Energy Carolinas' PER measure, which resulted in an overstatement of the amount of those savings by approximately \$1.2 million. The Company was still in the process of quantifying the amount of the resulting correction at the time of the Rider 4 hearing but agreed with the Public Staff to true-up the estimate to a more precise amount in a future filing. The Company has completed that analysis

1 and has computed the actual correction amount to be \$(1,234,538) (McGee 2 Exhibit 6). The portion that applies to Vintage 2 is \$(291,378). As the original 3 correction was not broken out into separate vintage impacts, an allocation was 4 made of the \$1.2 million based on the actual Vintage 2 correction amount of \$(291,378) to the actual total correction \$(1,452,398) resulting in the Vintage 2 5 6 component of the original correction of \$(240,742). The resulting adjustment to 7 Vintage 2 in Rider 5 for the impact of this true-up is \$(6,929), after applying the 8 85% billing factor. 9 Q. WHY IS THE COMPANY INCLUDING AN ADJUSTMENT RELATING 10 TO MYHER IN THE VINTAGE 2 TRUE-UP IN RIDER 5? 11 A. The EE program MyHER had not been approved at the time of the filing of Rider 12 4, which included the participation true-up for Vintage 2. The MyHER program 13 was approved on September 11, 2012. The avoided costs and lost revenue impacts have been applied back to January 2011 in Rider 5 and resulted in a 14 15 residential true-up of \$19,633, after applying the 85% billing factor. WHAT IS THE IMPACT OF THE FINAL TWO ADJUSTMENTS TO THE 16 Q. 17 VINTAGE 2 TRUE-UP IN RIDER 5? 18 The true-up of lost revenues related to a change in the variable O&M adjustment 19 to the lost revenue rates as previously discussed in this testimony resulted in a residential true-up of \$(26,312) and a non-residential true-up of \$(8,253). The 20 21 true-up of Rider 3 collections to actual 2012 collections resulted in a residential true-up of \$(324,827) and a non-residential true-up of \$87,441. 22

1	Q.	WHAT ARE THE COMPANY'S PROPOSED BILLING FACTORS
2		APPLICABLE TO NORTH CAROLINA JURISDICTIONAL ELECTRIC
3		CUSTOMERS FOR THE VINTAGE 2 TRUE-UP ADJUSTMENT?
4	A.	The Company's proposed billing factor for the Vintage 2 true-up adjustment
5		component of Rider 5 is 0.0364 cents per kWh for Duke Energy Carolinas' North
6		Carolina retail residential customers and 0.0051 cents per kWh for Duke Energy
7		Carolinas' North Carolina retail non-residential customers.
8		ADJUSTMENT TO VINTAGE 1 TRUE-UP
9	Q.	WHAT ADJUSTMENTS HAVE BEEN MADE RELATIVE TO THE
10		PREVIOUS PARTICIPATION TRUE-UP FOR VINTAGE 1?
11	A.	The same four adjustments made to the Vintage 2 true-up described above are
12		being made to the Vintage 1 true-up:
13		(1) The portion of the \$(1,234,538) actual PER adjustment applicable to the
14		Vintage 1 true-up is \$(1,060,730). As the original correction was not broken out
15		into separate vintage impacts, an allocation was made of the \$1.2 million based on
16		the actual Vintage 1 correction amount of \$(1,060,730) to the actual total
17		correction \$(1,452,398) resulting in the Vintage 1 component of the original
18		correction of \$(876,396). The resulting adjustment to Vintage 1 in Rider 5 for the
19		impact of this true-up is \$(25,224), after applying the 85% billing factor.
20		(2) The avoided costs and lost revenue impacts of MyHER have been applied
21		back to January 2010 in Rider 5 and resulted in a residential true-up of \$15,666,
22		after applying the 85% billing factor.

1		(3) The true-up of lost revenues related to a change in the variable O&M
2		component of the lost revenue rates as previously discussed in this testimony.
3		This true-up resulted in a residential true-up of \$(78,877) and a non-residential
4		true-up of \$1,976.
5		(4) The true-up of collections from Rider 3 to actual 2012 collections. The
6		residential true-up is \$(736,443) and the non-residential true-up is \$444,406.
7	Q.	WHAT ARE THE COMPANY'S PROPOSED BILLING FACTORS
8		APPLICABLE TO NORTH CAROLINA JURISDICTIONAL ELECTRIC
9		CUSTOMERS FOR THE VINTAGE 1 TRUE-UP ADJUSTMENT?
0	A.	The Company's proposed billing factor for the Vintage 1 EE true-up adjustment
1		component of Rider 5 is 0.0031 cents per kWh for Duke Energy Carolinas' North
2		Carolina retail residential customers and (0.0017) cents per kWh for Duke Energy
3		Carolinas' North Carolina retail non-residential customers.
4		II. <u>NEW PORTFOLIO</u>
5	Q.	WHAT COMPONENTS OF THE NEW PORTFOLIO ARE INCLUDED IN
6		RIDER 5?
17	A.	The estimated revenue requirement for the new portfolio component of proposed
8		Rider 5 includes an estimate of Vintage 2014 EE program costs plus an earned
9		utility incentive, which is based on total program Utility Cost Test ("UCT")
20		results, plus year one of net lost revenues. The EE revenue requirements are
21		determined separately for residential and non-residential customer classes. Rider
22 .		5 also includes an estimate of Vintage 2014 DSM program costs plus an
23		incentive, which is based on total program UCT results. The DSM revenue

requirements are determined separately for residential and non-residential customer classes.

3 SUMMARY

- 4 Q. PLEASE SUMMARIZE THE SPECIFIC RATE MAKING APPROVAL
 5 REQUESTED BY DUKE ENERGY CAROLINAS.
- 6 A. Duke Energy Carolinas is seeking approval of Rider 5, which includes the 7 formula for calculation of the Rider, as well as the charge to be effective for 2014. 8 As discussed above, the charge for Rider 5 contains a prospective Vintage 4 9 component; a prospective Vintage 3 component; a prospective Vintage 2014 10 component of the new portfolio; an EMF component related to Vintage 3 to true-11 up participation of customers participating in Vintage 3 EE and/or DSM 12 programs; and true-up adjustments related to Vintage 2 and Vintage 1. 13 Accordingly, the charge for Rider 5 for the Company's North Carolina retail customers is simply the sum of the prospective billing factors and the EMF/true-14 15 up adjustment billing factors for the components that apply to that customer based 16 on participation.
- 17 Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?
- 18 A. Yes.

Duke Energy Carolinas DSM/EE Cost Recovery Rider 5 Docket Humber E-7 Sub 1031 Exhibit Summary for Rider EE Exhibits and Factors

Residential Billing Factor

Residential Billing Factors for Rider 5 True-Up Components

					1
	Vintage 1 EMF				
,1	Vintage 1 EE True-up Revenue Requirement	\$4-5 Full-land			٠
12	Projected NC Residential Sales (kWh) for rate period	McGee Exhibit 2 pg; 1; Une 13	\$ 648,008		
3	SAW EE Revenue Requirement Vintage 1 True-up Residential Rider EE (cents per kWh)	McGee Exhibit 4	21,045,015,885		i
	The state of the s	Une 1 / Line 2 * 100	0.0031	Application	
	Vintage 2 EMF	•			
4	Vintage 2 EE True-up Revenue Requirement	44-F Fullbur 3 7 22			
5	Projected NC Residential Sales (kWh) for rate period	McGee Exhibit 2 pg. 2, Une 13	\$3, 7,650,847		
6	SAW EE Revenue Requirement Vintage 2 True-up Residential Rider EE (cents per kWh)	McGee Exhibit 4	21,045,015,885		
	The state of the s	Line 4 / Line 5 * 100	0.0364	Application	
	Vintage 3 EMF				
,7	Vintage 3 EE True-up Revenue Requirement	McCon Cubulate Com St. Line St. and 17	4 44		
8	Vintage 3 DSM True-up Revenue Requirement	McGee Exhibit 2 pg. 3, Line 9, col a	\$ 19,010,203		•
9	Vintage 3 Total EE/DSM True-up Components of Residential Revenue Requirement	McGes Exhibit 2 pg. 5, tine 7	S (2,173,753)	L	- 1
10	Projected NC Residential Sales (kWh) for rate period	Line 7 + Line 8	\$ 16,836,450		
11	SAW EE/DSM Revenue Requirement Vintage 3 True-up Residential Rider EE (cents per kW/h)	McGee Exhibit 4	21,045,015,885		
==	The second residence of the second residence and the second residence a	Line 9 / Line 10 * 100	0.0800	Application	٠.
	Residential Billing Factors for Bidox 5 Brosnestive Community	i			i
	Residential Billing Factors for Rider 5 Prospective Components	i	'	•	·
	Residential EE Rider Revenue Requirement Prospective Components				
12	Vintage 3 EE Prospective Amounts Revenue Requirement	McGee Exhibit 2 pg. 3, Line 9,col b	\$ 2,558,987		- 1
1.3	Projected NC Residential Sales (kWh) for rate period	McGee Exhibit 4	21,045,015,885		- 1
14	SAW EE Revenue Requirement Vintage 3 Prospective Component for Residential Rider EE (cents per kWh)	Une 12 / Une 13 * 100		Application	
		2.10 22 / 0.10 25 250	0.4147	Application	
15	Vintage 4 EE Prospective Amounts Revenue Requirement	McGee Exhibit 2 pg. 4, Line 3	\$ 13,086,106		ŧ
16	Projected NC Residential Sales (kWh) for rate period	McGee Exhibit 4	21,045,015,885		
17	SAW EE Revenue Requirement Vintage 4 Prospective Component for Residential Rider EE (cents per kWh)	Une 15 / Line 16 * 100	* 1	Application	
				~pprozector:	
	Residential Vintage 2014 Rider Revenue Requirement Prospective Components	_			1
1.8	Vintage 2014 Total EC/DSA4 Bennanting American American				ł
10	Vintage 2014 Total EE/DSM Prospective Amounts Revenue Requirement Projected Vintage 2014 EE Participants NC Residential Sales (kwh) for rate period	McManeus Exhibit 1 pg. 1, Line 7	15 63,818,603		
20	FO (DOAD Beautiful 2014 or Farticipants no residential Sales (RWn) for fate period	McManeus Exhibit 2	21,045,015,885		
40	EE/DSM Revenue Requirement Vintage 2014 Prospective Component for Residential Rider EE (cents per HWh)	Line 20 / Line 21 * 100	0.3032	Application	
1	Total Revenue Requirements in Rider 5 from Residential Customers				
2	p				
1	Vintage 1 EE True-up Revenue Requirement		\$1 548,008		,
	Vintage 2 EE True-up Revenue Requirement		674		
9	Vintage 3 Total EE/DSM True-up Components of Residential Revenue Requirement				
12	Vintage 3 EE Prospective Amounts Revenue Requirement				
15	Vintage 4 EE Prospective Amounts Revenue Requirement		-,,		
18	Vintage 2014 Total EE/OSM Prospective Amounts Revenue Requirement		2 2,000,110		
	Total Residential Revenue Requirement in Rider 5		5 63,818,603		
	Projected Vintage 2014 EE Participants NC Residential Sales (Irwh) for rate period		\$ 94,599,001		
•	Total EE/DSM Revenue Requirement for Residential Rider EE (cents per kWh)		21,045,015,885		
	·		0.4495		

Non-Residential Billing Factor

Non-Residential Billing Factors for Rider 5 True-Up Components

	CANA CE Barragia Barralmanate Trus est		!
	SAW EE Revenue Requirements True-up Vintage 1 EE True-up Revenue Requirement	McGee Eichibit 2 pg. 1, Line 24	(442,432)
_	Projected Vintage 1 EE Participants NC Non-Residential Sales (kwh) for rate period	McGee Exhibit 4	25,433,749,129
3	SAW EF Revenue Requirement Vintage 1 True-up Non-Residential Rider EE (cents per EWh)	Line 1/Line 2 * 100	(0.0017) Application
3	NAM ES VEALURE unden munit animis T tracah internationa unan minimis per pend		
	Vintage 2 EE True-up Revenue Requirement	McGee Exhibit 2 pg. 2, Line 24	\$ 1,300,720
	Projected Vintage 2 EE Participants NC Non-Residential Sales (kwh) for rate period	McGee Exhibit 4	25,730,978,533
•	SAW EF Revenue Requirement Vintage 2 True-up. Non-Residential Rider EE (cents per kWh)	Line 4/Line 5 * 100 .	0.0051 Application
۰	244 Et utatine utdantautid animak a march 1000 Herrania 1000 Herrania		
	Vintege 3 EE True-up Revenue Requirement	McGee Exhibit 2 pg. 3, Line 18, col a	\$ 18,748,721
′.	Projected Vintage 3 EE Participants NC Non-Residential Sales (kwh) for rate period	McGee Exhibit 43	26,083,585,861
•	SAW EE Revenue Requirement Vintage 3 True-up Non-Residential Rider EE (cents per EWh)	Une 7/Line 8 * 100	0.0719 Application
9	294A CE VENENINE MERRINEMENT ANNORS 2 (190-5)	-	
	DSM Revenue Requirements Trus-up		
	Vintage 3 DSM True-up Revenue Requirement	McGee Exhibit 2 pg. 5, Line 14	5 (1,776,680)
- 10	Projected Vintage 3 DSM Participants NC Non-Residential Sales (kwh) for rate period	McGee Exhibit 4	25,159,472,341
11	SAW DSM Revenue Requirement Vintage 3 True up. Non-Residential Rider EE (cents per MWh)	Line 10/Line 11 * 100	(0.0071) Application
12	TWA ONE MEASURE LICENTIFICATIONS 2 1.00 db 1.00.		
	an and and a public of the property of the Property of Components		
	Non-Residential Billing Factors for Rider 5 Prospective Components	ŧ	•
			•
	SAW EE Revenue Requirements Prospective Components		•
11	Vintage 3 EE Prospective Amounts Revenue Requirement	McGee Exhibit 2 pg. 3, Une 18, col b	\$ 1,858,419
13	Projected Vintage 3 EE Participants NC Non-Residential Sales (liwh) for rate period	McGee Exhibit 4	26,083,585,861
17	SAW EE Revenue Requirement Vintage 3 EE Prospective Component for Non-Residential Rider EE (cents per kWh)	Line 13/Line 14 * 100	0.0071 Application
13	SAW EC REVENUE REQUIREMENT VARIAGE SEE / HORDERS COMPANY	•	
	Vintage 4 EE Prospective Amounts Revenue Requirement	McGee Exhibit 2 pg. 4, Line 6	\$ 2,817,719
10	Projected Vintage 4 EE Participants NC Non-Residential Sales (kwh) for rate period	McGee Exhibit 4	26,241,390.557
1/	SAW EE Revenue Requirement Vintage 4 EE Prospective Component for Non-Residential Rider EE. (cents per kWh)	Une 16/Line 17 * 100	0.0107, Application
10	DAM EE HEAGURE HEGINELIUM ANICHEA CE LIOTHEFING COMPONITION	4	·
	Vintage 2014 Revenue Requirements Prospective Components		
10	Vintage 2014 EE Prospective Amounts Revenue Requirement	McManeus, Exhibit 1 pg. 2; Line 7.	\$22,747,603
20	Projected Program Year 2014 EE Participants NC Non-Residential Sales (kwh) for rate period	McManeus, Exhibit 2	25,506,516,072
20	EE Revenue Requirement Vintage 2014 Prospective Component for Non-Residential Rider EE (cents per kWh)	Line 19/Line 20 * 100	0.0892 Application
	CC CETERIOR NEGLECTER VALUE CONTRACTOR CONTR		
,	Vintage 2014 DSM Prospective Amounts Revenue Requirement	McManeus, Exhibit 1 pg. 2, Line 14	\$19,438,753
- 12	Projected Vintage 2014 DSM Participants NC Non-Residential Sales (kwh) for rate period	McManeus, Exhibit 2	24,348,167,204
23	DSM Revenue Requirement Vintage 2014 Prospective Component for Mon-Residential Rider EE. (cents per kWh.)	Line 22/Line 23 * 100	9.0798 Application
4	True DELEGINE GERRACHES ANTINGE TOTAL LANGUETTA COMPANYANTANIA		•
	Total Revenue Requirements in Rider 5 from Non-Residential Customers	-	
	TOTAL REVENUE AND ADDRESS OF THE PARTY OF TH		•
1	Vintage 1 EE True-up Revenue Requirement		\$ (442,432)
	Vintage 2 EE True-up Revenue Requirement		5 11300,720
	Vintage 3 EE True-up Revenue Requirement		\$ 18,748,721
	Vintage 3 DSM True-up Revenue Requirement	•	5 (1,776,680)
13		1	\$ 1,858,419
	Vintage 4 EE Prospective Amounts Revenue Requirement		\$ 2,817,719
	Vintage 2014 EE Prospective Amounts Revenue Requirement		\$ 22,747,603
	Vintage 2014 OSM Prospective Amounts Revenue Requirement		\$ 19,438,753
	Total Non-Residential Revenue Requirement in Rider S		\$ 64,692,822 Application

50,595,386 49,858,943

(736,443)

Duka Energy Carolinas ££ Vintage 1 (June 1, 2009 - December 31, 2010) Docket Number E-7, Sub 1031

True-Up of Avoided Cost Revenue Requirements & Net Lost Revenues For Vintage 1: Years 1, 2, and 3

The state of the s		
• • • • • •		
DECIDENTIAL	•	Revised VI Rever
RESIDENTIAL		Requires
1 EE Avoided Cost Component	Duff Exhibit 1 pg. 1 & 2 Line 8	\$ 35
2 Gross Receipts Tax and Regulatory Fee		
3 EE Avoided Cost Component	Line 1 * Line 2	\$ 36
4 Net Lost Revenues	Duff Exhibit 2, Line 10	\$ 24
5 Residential Save-A-Watt Revenue Requirement	Line 3 + Line 4	60
6 Billing Factor		
7 Residential Save-A-Watt Revenue Requirement	Line S * Line 6	\$ 51
8 Vintage 1 component of Supplemental Exhibit 1 adjustment:	McGee Exhibit 6	
9 Total Residential Save-A-Watt Revenue Requirement	Line 7 + Line 8	\$ 51
		آجو ۾ س
Adjustment to revenues collected:		
10 Amount collected through Rider 2 actual and Rider 3 Estimated	Prior Rider Exhibits	٠٠٠ و ١٤٠ ٠ و ١٤٠٠
11 Amount collected through Riders 2 and 3 actual	McGee Exhibit 3, Line 1:	عريالهم و
12 Adjustment for actual vs. estimated Rider 3 collections	Line 11 - Line 10	
		25 基份
Total Vintage 1 adjustment for Rider 5:		4.5
13 Residential Revenue Requirement True-up Amount	tine 9 - Line 12	1 1 1 1 1 1

						Detail of Adju	, turn	ents to Vintage 1	-	
evised Vintage 1 Revenue Regulrements	Ad	(kistiments to Vintage 1		PER Error Correction -; eliminate stimate, add actual	H	iCR - add actual	Ne	t Lost Revenue Rate Change Impact	en.	der 3 Collections Yrue-up
35,221,629	\$	/ (527,943)	\$	(545,758)	5	17,816				
1.034554		1.034554		1.034554		1,034554				
36,438,678	\$	(546,185)	5	(564,616)	5	18,431				
24,097,519	5	(\$88,910)	\$	(496, 114)	5	<u> </u>	Ş	(92,796)		
60,536,196		(1,135,095).	\$	(1,060,730)		16,431		(92,796)		
85%		85%		85%	٠	85%		85%		
51,455,767	\$	(964,831)	\$	(901,621)	S	15,666	5	(78,877)		
	\$	876,396	5	476,396						
51,455,767	\$	(88,435)	\$	(25,224)	\$	15,666	\$	(78,877)		
		•		•				·	41	.
									\$.	50,595,386
3	١.		l			•			3.1	. 49,858,943
*	s	(736,443)	ľ						S	(736,443
		648,008								

See McGee Exhibit 1 for rate

NON-RESIDENTIAL

26 Non-Residential Rider EE (cents per kWh):

Note: Schedule may not foot due to rounding

14 EE Avoided Cost Component	. Duff Exhibit 1 pg/1 & 2, Line 17
15 Gross Receipts Tax and Regulatory Fee	
16 EE Avoided Cost Component	- Une 14 " Une 15
17 Total Net Lost Revenues	Duff Exhibit 2, Line 20
18 Non-Residential Save-A-Watt Revenue Requirement	Line 16 + Line 17
15 Billing Factor	
20 Non-Residential Save-A-Watt Revenue Requirement	Line 18 Line 19
Adjustment to revenues collected:	•
21 Amount collected through Rider 2 actual and Rider 3 Estimated	Prior Rider Exhibits
22 Amount collected through Riders 2 and 3 actual	McGee Exhibit 3, Line 5
23 Adjustment for actual vs. extimated flider 3 collections	Line 22 - Line 21
Total Vintage 1 adjustment for Rider 5:	· · · · · · · · · · · · · · · · · · ·
24 Non-Residential Revenue Requirement True-up Amount -	Line 20 - Line 231
25 Projected NC Non-Residential Sales (kWh) for billing period	McGee Fuhitus 4

(Line 24/Line 25) * 100

Revi	40 Vintage 1
1 1	Revenue
Res	puirements
5	
i,	18,824,789
<u> </u>	1.034554
\$	19,475,261
5	1,963,183
\$	21,438,444
	85%
3	18,222,678
س برسم	
٠,	
0.00	
N. S.	April 1
- E	
A 5 1	
1 1 to 1	5-1-402 0
	10 (10 miles)
1	
	20 July 1
, 5.5°	"一件"在"管理"
7 1	an vilan kara

	ď	tail of Adjustn	n (crits	to Vintage 1
Adjustments to Vintage 1	Rai	ost Revenue te Change Impact	Nde	r 3 Collections True-up
\$ 1.034554				
\$				
\$ 2,322	\$	2,322		
\$ 2,322	5	2,322		
85%		85%		
\$ 1,974	5	1,974		
		:	\$ \$	14,142,096 "14,586,502
\$, 444,406			S	444,406
\$				
\$ 25,433,749,129				
 (0.0017)	1			

Duka Energy Carolinas EE Vintage 2 (January 1, 2011'- December \$1, 2011) Docket Humber E-7, Sub 1031

True-Up of Avoided Cost Revenue Requirements & Net Lost Revenues For Vintage 2; Years 1 and 2

RESIDENTIAL		Revised Vintage 2 Year 1 and Year 2 Revenue Requirements
1 EE Avoided Cost Component	Duff Exhibit 1 pg. 3, Line 8	5' 30,548,085
2 Gross Receipts Tax and Regulatory Fee		₹1.0345S
3 EE Avoided Cost Component	Line 1 * Line 2	\$ 31,603,644
4 Net Lost Revenues	Ouff Exhibit 2, Line 30	\$ 25,323,933
5 Residential Save-A-Watt Revenue Requirement	Line 3 + Line 4	\$ 56,927,577
6 Billing Factor	, : ·	851
7 Residential Save-A-Watt Revenue Requirement	Line 5 * Line 6	\$ 48,388,440
8 Vintage 2 component of Supplemental Exhibit 1 adjustment	McGee Exhibit 6	\$
9 Total Residential Save-A-Watt Revenue Requirement	Line 7 + Line 8	5 48,388,440
Adjustment to revenues collected:		
10 Amount collected through Rider 2 actual and Rider 3 Estimated	Prior Rider Exhibits	me it is now
11 Amount collected through Riders 2 and 3 actual	McGee Exhibit 3, Line 2	182
12 Adjustment for actual vs. estimated Rider 3 collections.	Line 11 - Une 10	

Line 9 - Line 12

(Line 24/Line 25) * 100

					Deta	III of A	Adjustments to \	int a	ce Z		
,	idjustments to Vintage 2		PER Error Correction - ninate estimate, add actual	н	ECR & Other		Lost Revenue Change Impact		up of Year 2 Lost renues to Actual		3 Collections
\$;	(200,368) 1,034554		(222,522) 1.034554	\$	22,154 1.034554			•			
5	(207,291)	5	(230,211)	5	22,920						
5	8,543,547	s	(61,167)	\$	<u> </u>	\$	(30,955)		8,635,669		•
5	8,335,256 85%		(291,378) 85%		22,920 69%		(30,955) 89%		8,635,669 85%		
\$ 5	7,085,817 (240,742)	5	(247,671) (240,742)		(19,482	5	1[26,312]	\$	7,340,319	-	
5	7,326,560		(6,929)	\$	19,482	\$	{26,312}	Ş	7,340.319	•	
										\$	30,645,701
		l								\$	30,321,421
5	(324,287)		_				•			<u>\$</u>	(324,28)
\$	7,650,847				,						

NON-	RESID	ENTIAL
------	-------	--------

- 14 EE Avoided Cost Component
- 15 Gross Receipts Tax and Regulatory Fee
- 15 EE Avoided Cost Component
- 17 Total Net Lost Revenues
- 16 Non-Residential Save-A-Watt Revenue Requirement

Total Vintage 2 adjustment for Rider 5: 13 Residential Revenue Requirement True-up Amount

- 19 Billing Factor
- 20 Non-Residential Save-A-Watt Revenue Requirement

Adjustment to revenues collected:

- 21 Amount collected through Rider, 2 actual and Rider 3 Estimated
- 22 Amount collected through Riders 2 and 3 actual
- 23 Adjustment for actual vs. estimated Rider 9 collections

*Total Vintage 2 adjustment for Rider 5:

- 24 Non-Residential True-up Amount
- 25 Projected NC Residential Sales (kWh) for billing period
- 26 Non-Residential Rider EE (cents per kWh).

Note: Schedule may not foot due to rounding

•	Year 1 and Year 2 Revenue Requirements			
Outl Exhibit 1 pg. 3, Line 17.	\$ 21,539,254 1,034554			
Une 14 * Une 15 * Ouff Exhibit: 2. Line 46 *	\$ 22,283,521 \$ 4,116,236			
Line 16 + Line 17	\$ 26,399,757			
Une 18 * Line 19	\$ 22,439,794			
3				
Prior Rider Exhibits McGee Exhibit 3, Line 6	A Part			
Line 22 - Line 21				
10mm 20 115mm 20				
Line 20 - Line 23 McGee Exhibit 4	E-SACHER			

_			Оезай о	Ad	ustments to V	/integr	2
Adjustments to Vintage 2		Net Lost Revenue Rete Change Impact		True up of Year 2 Lost Revenues 1 to Actual		Rider 3 Collections True-up	
\$	- ² -0						
\$-	2.43		(9,709)		1,642,840		
\$1	1,633,131				1,642,840	•	
\$:	1,633,131 85%	\$>	(9,709) \$5%	,	85%		
\$.	(1,388,16)	5	(8,253)	\$	1.396,414		
	• !					\$	8,117,646 8,205,087
5	\$7,441		٠	•		\$	87,441
5.	1,300,720						
	25,730,978,533	<u> </u>					
	0.0031		_				

ь

Duke Energy Carolinas

EE Vintage 3 (January 1, 2012 - December 31, 2012)

Docket Number E-7, Sub 1031

True-Up of Avoided Cost Revenue Requirements & Net Lost Revenues For Vintage 3, Year 1 and Estimated Year 3 Net Lost Revenues

RESIDENTIAL					Year.3 Revenue Requirement Estimate	
1 EE Avoided Cost Component	Duff Exhibit 1 pg. 4, Line 8		\$	22,750,585		
2 Gross Receipts Tax and Regulatory Fee	*	:		1.034554		
3 EE Avoided Cost Component	Line 1 * Line 2	·	\$	23,536,709		
4 Net Lost Revenues	Duff Exhibit 2, Line 50		\$	8,958,110	\$	3,010,573
5 Residential Save-A-Watt Revenue Regulrement	Line 3 + Line 4		•	32,494,819		3,010,573
6 Billing Factor				85%		85%
7 Residential Save-A-Watt Revenue Regulrement	Line 5 * Line 6		\$	27,620,596	\$	2,558,987
8 Total Collected for Vintage 3 (Rider 3 and Rider 4)	McGee Exhibit 3, Line 3		\$	8,610,393	`\$	
9 Residential,True-up Amount	Line 7 - Line 8		\$	19,010,203	\$	2,558,987
	·		•	See McGee	Exhibit 1 for	rate

NON-RESIDENTIAL		F	Revenue lequirement True-up	Year 3 Revenue Requirement Estimate	
10 EE Avoided Cost Component	Duff Exhibit 1 pg. 4, Line 17	\$	31,864,574		_
11: Gross Receipts Tax and Regulatory Fee		·	1.034554		
12 EE Avoided Cost Component	Line 10 * Line 11	\$	32,965,623		•
13 Total Net Lost Revenues	Duff Exhibit 2, Une 60	\$	2 <u>,497,2</u> 24	\$	2,186,375
14 Non-Residential Save-A-Watt Revenue Requirement	Line 12 + Line 13	\$	35,462,847	\$;	2,186,375
15 Billing Factor	•		85%		85%
16 Non-Residential Save-A-Watt Revenue Requirement	Line 14 * Line 15	\$	30,143,420	\$	1,858,419
17 Total Collected for Vintage 3 (Rider 3 and Rider 4)	McGee Exhibit 3, Line 7,	\$	11,394,699	_\$_	
18 Residential True-up Amount	Line 16 - Line 17	\$	18,748,721	\$	1,858,419
19 Projected NC Residential Sales (kWh) for rate period	McGee Exhibit 4	\$:	26,083,585,861	\$	26,083,585,861
20 Non-Residential Rider EE (cents per kWh)	(Une 18/ Line 19) * 100		0.0719		0.0071

Note: Schedule may not foot due to rounding

Vintage 4, Year 2 Revenue

2,817,719

0.0107

26,241,390,557

Duke Energy Carolinas EE Vintage 4 (January 1, 2013 - December 31, 2013) Docket Number E-7, Sub 1031 EstImated Net Lost Revenues For Vintage 4, Year 2

RESIDENTIAL	Requirement	
1 Net Lost Revenues	Duff Exhibit 2, Line 70	\$ 3,630,713 - 85%
2 Billing Factor 3 Total Residential Save-A-Watt Revenue Requirement	Line 1 * Line 2	\$ 3,086,106
		See McGee Exhibit 1 for rate
		•
	·	
		Vintage 4, Year 2
NON-RESIDENTIAL		Revenue Requirement
4 Total Net Lost Revenues 5 Billing Factor	Duff Exhlbit 2, Line 80	\$ 3,314,963 85%

Line 4 * Line 5

McGee Exhibit 4

(Line 6/Line 7)* 100

Note: Schedule may not foot due to rounding

8 Non-Residential Rider EE (cents per kWh)

6 Non-Residential Save-A-Watt Revenue Requirement

7 Projected NC Residential Sales (kWh) for billing period

Duke Energy Carolinas DSM Vintage 3 (January 1, 2012 - December 31, 2012) Docket Number E-7, Sub 1031 True-Up of Avoided Cost Revenue Requirements For Vintage 3

RESIDENTIAL			Vintage 3		
1 DSM Avoided Cost Component 2 Gross Receipts Tax and Regulatory Fee	Duff Exhibit 1 pg. 3, Line 9	\$	9,711,058 1.034554		
3 DSM Avoided Cost Component 4 Billing Factor	Line 1 * Line 2	\$	10,046,614 85%		
5 Residential DSM Revenue Requirement 6 Total Collected for Vintage 1 (Rider 3)	Line 3 * Line 4 McGee Exhibit 3, Line 4	\$ \$	8,539,622 10,713,375		
7 Residential DSM Revenue Requirement True-up Amount	Line 5 - Line 6	\$ See McGee B	(2,173,753) Exhibit 1 for rate		

NON-RESIDENTIAL		•	Vintage 3
8 DSM Avoided Cost Component	Duff Exhibit 1 pg.3, Line 18	\$	12,725,885
9 Gross Receipts Tax and Regulatory Fee		**	1.034554
10 DSM Avoided Cost Component	Line 8 * Line 9	Ś	13,165,615
11 Billing Factor	**	•	85%
12 Non- Residential DSM Revenue Requirement	Line 10 * Line 11	Ś	11,190,773
13 Total Collected for Vintage 1 (Rider 3)	McGee Exhibit 3, Line 8	Ś	12,967,453
14 Non-Residential DSM Revenue Requirement True-up Amount	Line 12 - Line 13	Ś	(1,776,680)
15 Projected NC Non-Residential Sales (kWh) for billing period	McGee Exhibit 4	•	25,159,472,341
16 Non-Residential Rider EE (cents per kWh)	(Line 14/Line 15) * 100	•	(0.0071)

Note: Schedule may not foot due to rounding

McGee Exhibit 3

Duke Energy Carolinas

DSM/EE Revenues Collected from Riders (By Vintage)

Docket Number E-7, Sub 1031

For Vintages 1, 2, and 3 True-Up Calculations

	•	_	Actual 2010 Rider 1	Actual 2011 Rider 2	Actual 2012 Rider 3	Total
Re	esidential			·		· ·
1	EE'	$v1^{-x}$	25,916,921	6,366,243	17,575,779	49,858,943
2		v2	•	22,641,166	7,680,255	30,321,421
3		v3		;	8,610,393	8,610,393
4	DSM	v3			10,713,375	10,713,375
N	on-Residential	b	-			
5	EE	v1	7,688,412	860,011	6,038,079	14,586,502
6		v2 .		7,165,813	1,039,274	8,205,087
7	·	v3	•		11,394,699	11,394,699
	v 94.4	4	•			42.057.452
8	DSM	v3			12,967,453	12,967,453

Ţ

Duke Energy Carolinas DSM/EE Cost Recovery Rider S Docket Number E-7 Sub 1031 Forecasted kWh Sales for Rate Period

	-
Tale	2014.4

:-		_	
FAN 2012	' Salac	Forecast	_ kWhe

North Carolina Retail:

1 Residential	21,045,015,885
2 Non-Residential	34,729,603,451

Ont Out Sales

3 Total Retail

Opt Out Sales		
		2012 kWh Usage
Vintage 1 Opt Out		
4 EE		9,295,854,322
5 05M		9,845,747,398
	• • • • • • • • • • • • • • • • • • • •	
Vintage 2 Opt Out	-	•
6 EE		8,998,624,918
7-D5M		9,952,030,590
•		-,,,,

Vintage 3 Opt Out 8 EE 9 DSM

Vintage 4 Opt Out

10 ÉE

11 DSM

Non-Residental Forecast Sales Less Opt Out

-

5-1/-03/003/-32	
55,774,619,336	
Anen Liste is	

9,295,854,322 9,845,747,398 6,998,624,918 9,952,030,590 8,646,017,590 9,370,131,110 8,488,212,894 9,646,561,762

V1 EE Rate	V1 DSM Rate Components	V2 EE Rate Components	V2 DSM Rate Components	V3 EE Rate	V3 DSM Rate	V4 EE Rate Components	V4 DSM Rate Components
34,729,603,451 9,295,854,322		34,729,603,451		34,729,603,451			34,729,603,451
3,233,659,522	9.845.747.398				,		

8,998,624,918 9,952,030,590

24,883,856,053 25,730,978,533 24,777,572,861 26,083,585,861

8,646,017,590

9,570,131,110

8,488,212,894

9,646,561,762 25,159,472,341 26,241,390,557 25,083,041,689

Duke Energy Carolinas EE Vintage 1 True Up for the Period June 1, 2009 to December 31, 2009 Docket Number E-7, Sub 1031 Allocation Factors

1 (10)

64.			•	MWH		•
SAW Sales Allocator		,				* *
1 NC RetailMWH Sales Allocation	· ·	Company Records		53,842,194		
2 SC Retail MWH Sales Allocation	1	Company Records		19,906,425	•	
3 Total Retail	-	Line 1 + Line 2	•	73,748,619		
Allocation 1 to state based on	kWh sales	:		· · · · · · · · · · · · · · · · · · ·		
4 NC Retail		Une 1 / Line 3	:	73.0077318%		
				NC	SC	Total
Demand Allocators		9		NC .		10141
5 Residential	`.	Company Records		5,281,284	1,692,049	6,973,333
6 Non Residential		Company Records		6,218,623	2,386,563	8,605,186
7 Total	112	Line 5 + Line 6		11,499,907	4,078,612	15,578,519
Allocation 2 to state based on	peak demand		i	1		
8 NC Retail		Line 7, NC / Line 7 Total		73.8190004%	•	
Allocation 3 NC res vs non-res	Peak Demand to reta	ail system peak		r	•	
9 NC Residential		Line 5 NC/ Line 7 Total		33.9010659%		
10 NC Non-residential	12*	Line 6 NC/ Line 7 Total		39.9179344%		
7						

Duke Energy Carolinas EE Vintage 1 True Up for the Period January 1, 2010 to December 31, 2010 Docket Number E-7, Sub 1031 Allocation Factors

			MWH	•	
SAW Sales Allocator	•	• •	**********************		
1 NC Retail MWH Sales Allocation	Company Records	1 .	. 57,382,346	•	
2 SC Retail MWH Sales Allocation	Company Records	i i	21,540,084		
3 Total Retail	Line 1 + Line 2	•	78,922,430	•	
		•			
Allocation 1 to state based on kWh sale:	3				
4 NC Retail	Line 1 / Line 3	,	72.7072722%		
Demand Allocators			NC NC	sc	Total
5 Residential	Company Records		5,494,974	1,731,591	7,226,565
6 Non Residential	Company Records		6,437,66 9	2,290,766	8,728,435
7 Total	Line 5 + Line 6	ŀ	11,932,643	4,022,357	15,955,000
Allocation 2 to state based on peak dem	and ·				
8 NC Retail	Line 7, NC / Line 7 Total	•	74.7893638%	•	
Allocation 3 NC res vs non-res Peak Dem	and to retail system peak	1			
9 NC Residential	Line 5 NC/ Line 7 Total		34.4404513%		
10 NC Non-residential	Line 6 NC/ Line 7 Total		40.3489126%	,	
4 4		•	11		4

Duke Energy Carolinas EE Vintage 2 True Up for the Period January 1, 2011 to December 31, 2011 Docket Number E-7, Sub 1031 Allocation Factors

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

Duke Energy Carolinas EE/DSM Vintage 3 True-up for the Period January 1, 2012 to December 31, 2012 Docket Number E-7, Sub 1031 Allocation Factors

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

McGee Exhibit 6

Duke Energy Carolinas Personalized Energy Report and OHEC Program True-up Docket Number E-7, Sub 1031 True-up of Savings Correction filed in Supplemental Testimony in Rider 4

		Α	B Supplemental	C Supplemental	D = A - B	E = D * 85%
		Actual PER OHEC	Adjustment to Rider 4	Adjustment by Vintage	Gross Diff	Diff @ 85%
\;\.	2000	/E2E E7A\	(520,590)	(442,501.60)	(14,983.48)	(12,736)
Vintage 1	2009	(535,574)		• •	187	(12,488)
Vintage 1	2010	(525,156)	(510,464)		(14,692.04)	•
Vintage 2	2011	(291,378)	(283,226)	(240,742.34)	· (8,151.74)	(6,929)
Vintage 3	2013	(100,290)	(97,484)	(82,861.36)	(2,805.76)	(2,385) (a)
•		(1,452,398)	(1,411,765)	(1,200,000)	(40,633.01)	(34,538)
	Billing Factor	85%	85%		85%	
	Revenue Requirement	(1,234,538)	(1,200,000)		(34,538)	

Electricity No. 4 North Carolina Seventh (Proposed) Revised Leaf No. 62 Superseding North Carolinas Sixth Revised Leaf No. 62

RIDER EE (NC) ENERGY EFFICIENCY RIDER

APPLICABILITY (North Carolina Only)

Service supplied under the Company's rate schedules is subject to approved adjustments for new energy efficiency and demandside management programs approved by the North Carolina Utilities Commission (NCUC). The Rider Adjustments are not included in the Rate Schedules of the Company and therefore, must be applied to the bill as calculated under the applicable rate. Cost recovery under Rider EE consists of two four-year term programs, years 2009 – 2013and years 2014 – 2017 as outlined separately below.

I. PROGRAM YEARS 2009-2013

GENERAL PROVISIONS

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

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

TRUE-UP PROVISIONS

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

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

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

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

leturn on Investment Cap
n Program Costs Percentage
15%
12%
9%
5%

Electricity No. 4 North Carolina Seventh (Proposed) Revised Leaf No. 62 Superseding North Carolinas Sixth Revised Leaf No. 62

RIDER EE (NC) ENERGY EFFICIENCY RIDER

DETERMINATION OF ENERGY EFFICIENCY RIDER ADJUSTMENT

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

EEA Residential (expressed as cents per kWh) =

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

Where

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

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

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

Where

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

II. PROGRAM YEARS 2014-2017

GENERAL PROVISIONS

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

TRUE-UP PROVISIONS

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

RIDER EE OPT OUT PROVISION FOR QUALIFYING NON-RESIDENTIAL CUSTOMERS

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

- a. The Customer certifies or attests to the Company that it has, or has plans for implementing alternative energy efficiency measures in accordance with quantifiable goals.
- b. Electric service to the Customer must be provided under:
 - a. 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.
 - b. An electric service agreement for general service as provided for under the Company's rate schedules where the Customer's annual energy use is 1,000,000 kilowatt hours or more.

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

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

- Qualifying customers may opt out of the Company's energy efficiency programs each calendar year only during the
 annual two-month enrollment period between November 1 and December 31 immediately prior to a new Rider EE
 becoming effective on January 1. (Qualifying new customers have sixty days after beginning service to opt out).
- Customers may not opt out of individual energy efficiency programs offered by the Company. The choice to opt out
 applies to the Company's entire portfolio of energy efficiency programs.

North Carolina Sixth (Proposed) Revised Leaf No. 62 Effective for service on and after January 1, 2014 NCUC Dockets No. E-7, Sub 1031 and 1032 Order dated

Electricity No. 4 North Carolina Seventh (Proposed) Revised Leaf No. 62 Superseding North Carolinas Sixth Revised Leaf No. 62

RIDER EE (NC) ENERGY EFFICIENCY RIDER

- If a customer participates in any vintage of energy efficiency programs, the customer, irrespective of future opt out
 decisions, remains obligated to pay the remaining portion of the lost revenues for each vintage of energy efficiency
 programs in which the customer participated.
- Customers who elect to opt out during the two-month annual enrollment period immediately prior to the new Rider EE
 becoming effective may elect to opt in to the Company's energy efficiency programs during the first 5 business days of
 March each calendar year. Customers making this election will be back-billed retroactively to the effective date of the
 new Rider EE.

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

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

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

ENERGY EFFICIENCY RIDER ADJUSTMENTS (EEA) FOR ALL PROGRAM YEARS

The Rider EE amounts applicable to the residential and nonresidential rate schedules for the period January 1, 2014 through December 31, 2014 including revenue-related taxes and utility assessments are as follows:

<u>Residential</u>	Vintage 1, 2, 3,4	0.1463¢ per kWh
•	Vintage 2014	0.3032¢ per kWh
	Total Residential Rate	0.4495¢ per kWh
Nonresidential		
Vintage	1	
Ene	rgy Efficiency	(0.0017)¢ per kWh
Den	nand Side Management	NA
Vintage	2	
Energy Efficiency		0.0051¢ per kWh
Den	nand Side Management	NA
Vintage	3	
Ene	rgy Efficiency	0.0790¢ per kWh
Der	nand Side Management	(0.0071)¢ per kWh
Vintage	4	
Ene	ergy Efficiency	0.0107¢ per kWh
	mand Side Management	NA .
Vintage	2014	
Ene	ergy Efficiency	0.0892¢ per kWh
Der	nand Side Management	0.0798¢ per kWh
Total No	nresidential	0.2537¢ per kWh

Electricity No. 4 North Carolina Seventh (Proposed) Revised Leaf No. 62 Superseding North Carolinas Sixth Revised Leaf No. 62

RIDER EE (NC) ENERGY EFFICIENCY RIDER

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