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AUG 1 0 2009

August 10, 2009

N.C Utilities Commission

Ms. Renné C. Vance, Chief Clerk North Carolina Utilities Commission 4325 Mail Service Center Raleigh, North Carolina 27699-4325

RE: Docket No. E-7, Sub 831

Dear Ms. Vance:

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Enclosed for filing are the original and thirty (30) copies of Duke Energy Carolinas, LLC's Responses to the Commission's Pre-Hearing Order Requiring Verified Information in the above referenced docket.

Part of the Response to Number 18 is CONFIDENTIAL and is being filed under seal.

Sincerely, Robert W. Kaylor

Robert W. Kaylor

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Enclosures

cc: Parties of Record

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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

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AUG 1 0 2009

DOCKET NO. E-7, SUB 831

Clerk's Office N.C Utilities Commission

In re:	)
Application of Duke Energy Carolinas, LLC	) DUKE ENERGY CAROLINAS'
For Approval of Save-a-Watt Approach,	) RESPONSES TO THE COMMISSION'S
Energy Efficiency Rider and Portfolio of	) PRE-HEARING ORDER REQUIRING
Energy Efficiency Programs	) VERIFIED INFORMATION
	)

1. Please provide a listing of all industrial and large commercial customers, if any, who have todate notified Duke that they have opted out of participation in the Company's new demand-side management (DSM) and energy efficiency (EE). measures. If there are customers who have already opted out of participation, please explain why appropriate adjustments, consistent with those described in Exhibit B of the Settlement Agreement, in Paragraph No. D.5. of the Settlement Terms, should not be made in this proceeding.

#### <u>Response</u>

As of August 4, 2009, the Company's records show that 391 industrial and large commercial customer accounts with an aggregate load of 4.0 million kWh have opted out of Duke Energy Carolinas' energy efficiency (EE) programs. This aggregate load constitutes approximately 7.1% of the Company's total load based upon 2008 North Carolina retail sales levels. Attachment 1-1 provides the names of the customers that have opted out and the number of associated non-participating accounts. These customers have opted out of the Company's currently offered programs, which do not include demand-side management (DSM) programs. Also, the full rider charge for DSM and EE programs is not yet known because the Company's compensation mechanism remains unresolved. The Company believes that adjustments to the Company's avoided cost targets and proposed revenue requirements should not be made at this time because those customers who have opted-out may opt back in once DSM programs are offered, a clear revenue recovery mechanism has been approved, and they can better assess the costs and benefits of participating. The Company proposes to make the necessary and appropriate adjustments to its avoided cost targets and revenue requirements in a compliance filing of Rider EE after the Commission issues its final order in this proceeding.

2. By Letter filed May 1, 2009, Duke notified the Commission that it would implement Rider EE (NC), effective June 1, 2009, on an interim basis for the Company's approved conservation programs. In that same Letter, Duke stated that the Company would "true-up the interim rider charges to the compensation mechanism and rider ultimately approved by the Commission in this docket." Please provide an explanation, including work papers, of how the Company proposes to proceed in this regard.

#### **Response**

Revenue requirements related to programs implemented effective June 1, 2009 are initially estimated as part of Vintage 1 revenue requirements, and will be adjusted for actual participation, and finally adjusted for verified actual results subject to the earnings cap, similar to the process proposed for vintage years one through four of the energy efficiency plan. The timeline attached as Attachment 2-1 shows the revenue requirement components of each annual Rider EE proposed for recovery of costs and incentives of the four-year program and illustrates the true-up process for each vintage of the program. In addition, the Company expects to make any additional adjustments to Rider EE for Vintage 1 necessary to comply with the Commission's final order in this proceeding in a compliance filing after the order is issued. Such adjustment, if needed, would be intended to restate the revenue requirements for Vintage 1 in accordance with Commission findings, and compute a revised rider amount that would collect over the remaining billing period for Vintage 1 (through August 31, 2010) the adjusted revenue requirements less amounts collected to-date under the interim rider amounts.

3. In Exhibit B of the Settlement Agreement, Paragraph No. A.1. of the Settlement Terms states, in part, that, "... the Company must recover the actual costs of programs, which includes marketing, implementing, and administering energy efficiency and demand-side management programs and impact evaluation studies". Please provide on a program-by-program basis, a detailed listing by type, including the year-by-year projected amounts, of the program costs included in the four-year pilot program. Please include in your response, as a separate line item, any capital costs which are included in such projected program costs. Please provide a detailed explanation regarding the types of capital costs, if any, included and the projected recovery period for such costs. In addition, please state whether any carrying costs are included in projected program costs are included in projected program costs. If so, please provide the rate or rates and the year-by-year calculation of such carrying costs for each program.

### **Response**

Please see Attachment 3-1 for a detailed listing on a program-by-program basis of the projected program costs for the four year modified save-a-watt proposal.

For the purposes of calculating estimated annual program costs and estimated annual revenue requirements, all costs expected to be incurred, including any costs that would be capital costs, will be reflected for the year in which the costs are incurred. Therefore, if results are consistent with the projections, revenues for each year will be sufficient to cover costs incurred in such year, including any capital costs. Accordingly, for any capital items, depreciation expense equal to the amount of the total cost for any capital items will be recorded in the year the cost is incurred. In other words, because the costs for the capital item(s) will have been recovered in the year incurred, the capital item will be fully depreciated in the year the cost sare incurred, depreciation expense will be adjusted, as appropriate, to reflect the amount of revenues recorded, and any remaining undepreciated balances will be depreciated in a following period(s) as corresponding revenue is recorded. No program costs would carry beyond the four-year term of the plan.

The Company has not included any carrying costs in its program costs.

**Responding Witnesses:** Raiford L. Smith – paragraph 1. J. Danny Wiles – paragraphs 2-3.

4. For purposes of the Settlement Agreement and for reporting the Company's regulated earnings to the Commission in Duke's quarterly NCUC ES-1 Reports, please define the terms "actual program revenues" and "actual program costs." That is, provide a complete detailed descriptive listing of the revenues and types of costs that would be included in each category. Are net lost revenues considered to be an actual program revenue? Please explain.

### <u>Response</u>

The term "actual program revenues" is intended to represent all amounts earned pursuant to the modified save-a-watt proposal. Actual program revenues would include amounts earned for net lost revenues. Amounts earned pursuant to the modified save-a-watt proposal generally represent the total avoided cost savings as a result of implementing EE and DSM programs based on actual participation or measured and verified results to date. Accordingly, actual program revenues will include amounts billed to customers, including amounts billed for net lost revenues, and may be adjusted for actual program results to date (*i.e.*, participation, impacts, and achievement of the earnings cap).

"Actual program costs" are intended to represent all expenditures incurred to pursue the modified save-a-watt proposal. Actual program costs include costs associated with marketing, implementation, and administering EE and DSM programs, measurement and verification studies, capital costs, and other program-related expenses. These costs may consist of Duke Energy Carolinas labor and related expenses, amounts paid to third parties or program incentives paid to participants to induce them to utilize energy efficient or DSM products.

Revenues recorded to recover net lost revenues are simply intended to keep the Company whole relative to reduced usage, and are not subject to the earnings caps discussed in the Settlement Agreement. Both the revenues received, and the net lost revenues, will be reflected in the quarterly ES-1 Reports as an effect of EE and will be identified in the supplementary schedules to the quarterly NCUC ES-1 Reports.

**Responding Witness:** J. Danny Wiles

5. On Page 6, Lines 12 - 14, Duke witness Wiles testified that "[t]he terms of the Agreement are intended to provide for the recovery of program costs as they are incurred; therefore, the request for program cost deferral is not needed from a GAAP accounting practice viewpoint". Does this statement mean that Duke's customers will have completely paid for all program costs related to each approved program included in the pilot program at the conclusion of the four-year period? For example, if a program or vintage year starts in year four of the pilot program will all program costs related to such programs be fully recovered by the Company in year four? Please explain.

#### **Response**

Yes, with the exception of the final true-up which takes place after Year 4 of the program, Duke Energy Carolinas customers will have paid for all program costs related to each approved program by the end of the four year period. Customers will also pay for net lost revenues associated with Vintage Years 3 and 4; however, net lost revenue recovery is not associated with program costs. Please see Attachment 2-1, which outlines the timing of revenue collection and true-up adjustments.

6. Does the Company anticipate that additional (new) programs will be introduced during the four-year pilot program? If so, how does the Company propose to recover the program costs related to such new programs?

#### **Response**

As EE programs mature and expire, new programs must be developed in order for the Company to continue to meet its efficiency targets. The Company has adopted a disciplined approach to piloting new ideas in order to accurately estimate their cost-effectiveness, lost revenues, revenues, energy reductions, and capacity impacts. These programs will be introduced from time to time in order to test and refine these concepts on a small scale. Based on what the Company learns from these pilot efforts, programs may then be rolled out on a wide-scale basis at a later date.

New programs will alter the amount of avoided costs, program costs, impacts, and lost revenues that were originally projected in the Company's energy efficiency portfolio. Because new programs may be introduced at various times throughout the year, the Company proposes to update Rider EE for new programs (including pilot programs) as part of the annual filing processes for the vintage year in which a program was implemented, and then again during the final true-up process based on independently measured and verified results. See also footnote number 3 in Attachment 2-1.

7. With respect to the total revenue requirements provided in Exhibit B of the Settlement Agreement, in Paragraph No. H.3. of the Settlement Terms, please provide a detailed listing by year and by program of the various components which comprise the estimated revenues at 85% and 100% achievement (i.e. the amount related to recovery of program costs, the amount related to the recovery of incentive compensation, the amount related to the recovery of net lost revenues, etc.).

# **Response**

Please see Attachments 7-1 and 7-2 detailing revenue recovery, by component, at 85% and 100% achievement, respectively. Avoided cost based revenues are intended to cover both program costs and incentive compensation because there is no direct recovery of program costs under the modified save-a-watt compensation model.

\*Note: Attachments 7-1 and 7-2 reflect the Company's proposed allocation factors, which are non-settled issues in this proceeding.

8. In Exhibit B of the Settlement Agreement, Paragraph No. 0.6. of the Settlement Terms states that "[t]he Company's avoided cost target is \$754 million (nominal system dollars) based on programs implemented during the four-year term of the agreement..." Please provide on a year-by-year basis and by program what portion of the \$754 million is related to DSM programs and what portion is related to EE programs. In addition, please provide a breakdown of the \$754 million into the various savings components and provide a definition of each component. Please provide summary work papers which set forth the calculation of the Company's avoided cost target of \$754 million.

#### <u>Response</u>

Attachment 8-1 provides the projected avoided costs for capacity and energy in total (nominal dollars) for the four-year term of the agreement as well as year-by-year for each program. It also provides information on the portion of avoided costs related to DSM programs and the portion of avoided costs related to EE programs. It also notes that for EE programs, 100% of the avoided costs are related to the EE programs for all years. Likewise, for DSM programs, Duke Energy Carolinas has assumed 100% of the avoided costs are related to the DSM programs for all years.

For the purposes of this proceeding, avoided costs are composed of two components: capacity and energy. Avoided capacity cost is the value of capacity reductions due to reductions in peak load kW. It is valued using the forecast of avoided capacity cost per kW-year. Avoided energy cost is the value of reductions in kWh energy use. It is valued using the forecast of avoided energy cost per kWh along with the hourly timing of the kWh load reductions.

Work papers are provided along with Attachment 8-1. The work papers also provided year-byyear the portions of avoided costs attributable to capacity and energy for each program.

**Responding Witness:** Dr. Richard Stevie

9. With respect to the chart entitled, "System Portfolio Impacts" contained in Exhibit B of the Settlement Agreement, in Paragraph No. D.6. of the Settlement Terms, do the figures provided each year for the MWh and MW amounts relate to an increase over a base year? (i.e. is the Year 3 amount of 872,548 MWh compared to a base year? If so, what year is the base year? Please provide the MWh and MW amounts for the base year.) Please explain.

# <u>Response</u>

Yes, the results shown in Exhibit B are an increase over a base year. In this exhibit, the base year is assumed to be zero MWhs and MWs. Thus, for each year shown in Exhibit B, the MWhs represent the cumulative, nominal impacts associated with the Company's energy efficiency portfolio. The MWs represent each year's cumulative peak reduction associated with EE and DSM programs. In Year 5 of the Exhibit B, the MWs shown represent the reductions associated with EE program impacts from Vintages 1 through 4 in Year 5, but include no impacts from DSM programs.

### Responding Witness: Raiford Smith

10. Do the Stipulating Parties consider that the term "return on investment" and "return on program costs" are, for purposes of the Settlement Agreement, the same conceptually? Please explain.

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#### <u>Response</u>

Yes, the terms were used interchangeably in the Settlement Agreement.

11. Regarding the earnings caps provided in Exhibit B of the Settlement Agreement, in Paragraph No. F.1. of the Settlement Terms, please provide a work paper which sets forth the calculation of the corresponding pretax return on program costs for the 5%, 9%, 12%, and 15% after-tax earnings cap rates.

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#### <u>Response</u>

In this proceeding the Company has used the discount and tax rates from the 2006 Avoided Cost filing. The combined state and federal tax rate is 37.1%. To calculate the pre-tax return on program costs that correspond to the after-tax earnings cap, the after-tax rates need to be grossed up for taxes:

	Corresponding		
After-Tax Cap	Pre-Tax Rate		
15.0%	23.8%		
12.0%	19.1%		•
9.0%	14.3%		
5.0%	7.9%		
Notes:			
Assumes Composite I	ederal and State Income	Tax Rate of :	37.100%

After-tax Rate / (1 - Tax Rate) = Pre-Tax Rate

12. Are the costs associated with the regional efficiency advisory group discussed in Exhibit B of the Settlement Agreement, in Paragraph Nos. K.1. through K.6. of the Settlement Terms, included as estimated program costs? Please provide the projected year-by-year expense amounts. If these costs will not be recovered as program costs, how will they be recovered? Has a third-party facilitator for the regional efficiency advisory group been identified and/or selected and, if so, who will serve in that capacity?

#### **Response**

Yes, the costs associated with the regional efficiency advisory group discussed in Exhibit B of the Settlement Agreement are included in the Company's projected program costs. However, the Company does not at this time have an estimated year-by-year projection of these expense amounts. The Company's avoided cost-based compensation under Rider EE is intended to cover costs associated with the regional efficiency advisory group, as well as other program costs and incentives.

A third party facilitator for the regional efficiency advisory group has not been selected yet.

### Responding Witness: Raiford Smith

13. In Exhibit B of the Settlement Agreement, Paragraph No. G.1. of the Settlement Terms states that net lost revenues shall be recovered for 36 months for each vintage year, except that the recovery of net lost revenues will end upon Commission approval of, among other things, the implementation of new rates in a general rate case or comparable proceeding to the extent that rates set in a rate case or comparable proceeding are set to explicitly or implicitly recover those net lost revenues. Pursuant to such provision of the Settlement Agreement, has any adjustment been made in Docket No. E-7, Sub 909, Duke's pending general rate case proceeding filed on June 2, 2009, related to the projected amount of net lost revenues included in this present proceeding?

# **Response**

No. The test year for Docket No. E-7, Sub 909 is 2008 and Duke Energy Carolinas had not implemented any EE programs in the test year. Therefore, the Company has not proposed any adjustment in its pending general rate proceeding for net lost revenues associated with EE programs.

14. Duke witness Farmer testified on Page 15, Lines 8-9, that "[t]he calculation of net lost revenues does not apply to demand-side management programs". This statement appears to be in conflict with the following statement included in Exhibit B of the Settlement Agreement, in Paragraph No. G.1. of the Settlement Terms: "Net lost revenues mean revenue losses, net of marginal costs avoided at the time of the lost kilowatt hour sale(s) incurred by the Company's public utility operations as the result of a new demand-side management or energy efficiency measure." Please explain which statement is correct.

#### **Response**

Mr. Farmer's statement is correct. Although reductions in billed kW demands and kWh sales from those customers participating in new DSM programs may result in a decrease in jurisdictional revenue and a corresponding reduction in fixed cost recovery, the determination of net lost revenues recoverable under the terms of the Settlement Agreement do not include any net lost revenues attributable to new DSM programs.

15. With respect to Farmer Exhibit No. 1 attached to the testimony of Duke witness Farmer filed on June 19, 2009, it appears that Footnote Nos. 2 and 4 were inadvertently omitted from the schedule. Please provide a revised copy of Farmer Exhibit No.1 with all appropriate footnotes.

#### **Response**

Please see Attachment 15-1 for a revised copy of Farmer Exhibit No. 1.

16. The Settlement Agreement is for four years and in numerous places the Settlement Agreement and the supporting testimony reference "Year 1." Please clarify, when "Year 1" will commence and when it will conclude.

#### **Response**

See Attachment 2-1. This attachment sets forth the Company's expectations for when Vintage Year I will commence and when it will conclude.

17. Page 15, Lines 5-11, of Duke witness Farmer's settlement testimony explains how net lost revenues would be calculated: "The Company calculated the portion of retail tariff rates representing the recovery of fixed costs by deducting the recovery of fuel costs from its tariff rates." Please answer the following questions:

a. How this approach complies with Commission Rule R8-68(b)(5) which defines net lost revenues as being "revenue losses, net of marginal costs avoided ... " Do the Stipulating Parties agree that fuel costs are Duke's only marginal costs? Does Duke have other kinds of marginal costs that the Company avoids when EE and DSM programs are effective? If yes, please explain why those marginal costs are not being considered in the calculation of net lost revenues.

b. Is the calculation referred to on Lines 9-11 in the record? If yes, please provide a citation. If no, please provide the calculation.

c. Would this calculation be updated if Duke's tariffs change as a result of its general rate case (Docket No. E-7, Sub 909)?

#### **Response**

- a. The Company believes that variable O&M costs should also be included in the determination of net lost revenues as a marginal avoided cost and would propose to update its calculations of net lost revenues to subtract variable O&M cost in addition to fuel cost in its compliance filing of Rider EE after the Commission issues a final order. The Company is not aware of other costs at the margin, other than fuel and variable O&M that are avoided as sales are reduced.
- b. No, the calculation used is not currently in the record. The equation is the tail block rate net of fuel times the kWh savings. The values were computed in DSMore.
- c. See response to Question 13. However, the calculation of net lost revenues that would be recovered through Rider EE is based on the approved rates in effect during the time period of the lost kWh sales. As such, any approved changes in future general rates will be reflected in the calculation of net lost revenues through Rider EE.

18. In Exhibit B of the Settlement Agreement, Paragraph No. 0.4. of the Settlement Terms states:

To address any concern that the avoided-cost savings target could be met merely through an increase in per MWh and per MW-Year avoided energy costs and capacity costs rather than through energy and capacity savings, the per MWh and per MW-Year avoided energy costs and avoided capacity costs will be fixed at the outset of the plan for its fouryear term. If the Company's combined avoided energy and capacity costs increase or decrease by more than 25%, due to changes in the per MWh and per MW-Year avoided energy or capacity costs, the programs may be re-analyzed ... [Emphasis added.]

Page 6, Lines 11-16 of Duke witness Schultz's settlement testimony states:

The avoided energy costs will be based on the avoided energy costs per the Company's Integrated Resource Plan, as described in the direct testimony of Company Witness Dr. Stevie.

Turning to Dr. Stevie's direct testimony filed April 4, 2008, Page 14, Lines 16-19:

Comparing the energy costs from an IRP with the energy efficiency impacts to one without the energy efficiency impacts provides the best overall estimate of the avoided energy costs that also embodies any base load and intermediate avoided capacity costs not captured in the peaker capacity cost. This approach and analysis will be conducted annually, to ensure that the estimation and valuation of avoided energy costs is consistent with the Company's alternative supply side resources, and with forward expectations of avoided energy costs. [Emphasis added.]

Confidential Attorney General's Office Stevie Cross-Examination Exhibit No. 1 provides various specific dollar values for each year (2008 through 2027), under the heading "Avoided Energy Costs \$/MWH."

Under the Settlement Agreement, will avoided energy costs, in fact, "be fixed," that is, will the avoided cost MWh be the same for the term of the Settlement Agreement? If the avoided energy cost is fixed, please state what the avoided energy cost is, under the Settlement Agreement, in dollars per MWh, and how it was calculated. If the avoided energy cost will, in fact, change during the term of the Settlement Agreement, please explain what is proposed and how the avoided energy cost will be calculated. Will the dollar values in Confidential Attorney General's Office Stevie Cross-Examination Exhibit No. 1 be used? Please explain. Finally, exactly what pages of Dr. Stevie's direct testimony and exhibits are relevant to the Settlement Agreement? That is, what exactly was Duke witness Schultz referencing in his settlement testimony?

#### **CONFIDENTIAL Response**

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With respect to just avoided energy costs, under the Settlement Agreement the forecast of avoided energy costs per MWh will remain fixed for the term of the Settlement Agreement, unless the avoided costs vary by more than 25% as stated in Mr. Schultz's settlement testimony. The forecasted annual values for the average avoided energy costs per MWh that were used in

the estimation of avoided energy costs for each EE program/measure are provided in the following table.

#### [BEGIN CONFIDENTIAL]

#### [END CONFIDENTIAL]

The calculation of the avoided energy costs was discussed in the Direct Testimony of Dr. Stevie (see page 13, line 20, to page 14, line 16). The Company completed an analysis of the EE/DSM programs within the Integrated Resource Planning (IRP). Comparing the energy costs from an IRP with the impacts from the EE/DSM programs included to an IRP without the impacts from the EE/DSM programs provides the best overall estimate of the avoided energy costs that also embodies any base load and intermediate avoided capacity costs not captured by the peaker capacity costs.

The forecast of avoided energy costs provided above will be used for the term of the Settlement Agreement unless there is a change of more than 25%. These are the same as on the Confidential Attorney General's Office Stevie Cross-Examination Exhibit No. 1.

It should be noted that: (1) total avoided costs also include those for avoided capacity and (2) the avoided energy cost per MWh for a specific program or measure will differ from those above due to the load shape of a specific program/ measure. For example, a program or measure that reduces load more during the summer will generate a higher avoided energy cost per MWh. Conversely, a program or measure that reduces load more during off-peak times will have a lower avoided energy cost per MWh.

With respect to the testimony of Dr. Stevie, Mr. Schultz was referring to the sentence on page 14, lines 13 to 16 of Stevie Direct Testimony.

Responding Witness: Dr. Richard Stevie

19. Page 7, Lines 8-9 of Duke witness Schultz's settlement testimony reference the "NPV of avoided lifetime capacity and energy costs ... " Please explain how this will be calculated and provide relevant references to the record in this proceeding.

#### **Response**

On page 6, lines 1-16 of Witness Schultz's Settlement Testimony, Mr. Schultz outlines the source of the avoided cost rates used in the Company's calculations. Using these rates, the specific nominal avoided cost dollars for each year are calculated using the DSMore model, referenced on page 10, line 3 through page 14, line 24 of Duke Energy Carolinas' Witness Stevie's Direct Testimony. In this section of his testimony, Dr. Stevie discusses how "DSMore estimates the value of an energy efficiency measure at an hourly level across distributions of weather and/or energy costs or prices." For the net present value ("NPV") calculation the Company is using a discount rate of 7.46%, as stated on page 6, lines 16-17 of Witness Schultz's Supplemental Testimony. In the NPV calculation, the Company does not discount the first year because the avoided costs are being present-valued back to that year.

**Responding Witness:** Raiford Smith

20. Consistent with Commission Rule R8-68(b)(5), the following sentence appears in Exhibit B of the Settlement Agreement, in Paragraph No. G.1. of the Settlement Terms:

Net lost revenues shall also be net of any increases in revenues resulting from any activity by the Company's public utility operations that cause a customer to increase demand or energy consumption, whether or not that activity has been approved pursuant to R8-68.

Please provide examples of activities that could cause revenue increases and result in reductions to net lost revenues? If revenues increase as a result of wholesale sales, would net lost revenues be reduced? What procedures will the Company utilize to identify and record any such revenue increases?

# <u>Response</u> [NOTE: The position set forth below on what constitutes "found" revenues for purposes of determining net lost revenues is the position of Duke Energy Carolinas and does not constitute the position of the other settling parties.]

The issue of net lost revenues relative to the increase in net revenues (or "found" revenues) deserves careful attention and consideration. Duke Energy believes it is important to acknowledge that there are two types of changes in revenues. The first occurs as a result of changes in the economy or actions of customers that change their energy use up or down that are independent of the Company's energy efficiency and DSM programs. The second are actions of customers that change their energy use up are down that are directly related to the Company's energy efficiency and DSM programs.

With regard to the first type, these are changes that do not result from any activity by the Company's public utility operations. If we are to count revenue changes under this first type as "found" revenues, even those that may occur from economic development actions, then we must also count decreases that occur when a plant or business closes as well as any reductions in energy use from conservation that occurs in response to an increase in electricity price. To consider increases and decreases on a case-by-case basis on such a broad basis is incorrect and creates an administrative nightmare. If these are to be all considered included, Duke Energy believes the Commission might as well investigate whether it is more appropriate to institute a decoupling mechanism because every increase or decrease in revenues must be considered. Instead, Duke Energy contends that the application of lost and found revenues should be limited to the results of those actions taken by customers in response to the Company's EE and DSM programs. Here, the management of the information becomes more workable. Examples of customer activities that could cause increases in electric net revenues involve programs that encourage customers to use more electricity by providing incentives for installing additional energy using appliances or switching fuels from a different source (such as natural gas or propane) to electricity. Generally, the Company does not have any programs that are designed or intended to produce such a result. The lone exception could be incentives offered to install thermal storage equipment which could cause an increase in energy consumption. If as a result of the measurement and verification process it is determined that a particular measure increases energy consumption, the impacts would be used to reduce the level of lost sales and lost revenues. In addition, if it is found that, in spite of the design of the program, a customer or customers switched fuels to electricity from another source, the increase in those revenues would be used to reduce the level of lost sales and revenues from the EE programs. The Company's intent is not to resurrect the electric and natural gas competition issues that have been previously addressed by the Commission.

All of the Company's EE and DSM programs (with the exception noted above) are designed to reduce electric energy consumption, not increase it. Decreases in energy consumption originate when customers use less electricity by installing more efficient appliances, equipment, or other processes. Issues of lost and "found" revenues should be restricted to the activities associated with the Company's EE and DSM programs.

Further, lost revenues for the purposes of the recovery through the proposed EE Rider would not be affected by increases (or decreases) in wholesale sales. The Company's firm as native load wholesale sales involve cost recovery through a formula rate that recovers the Company's actual costs. As such, fixed costs allocable to wholesale customers are fully recovered; there is no excess or deficiency. Increases or decreases in wholesale sales do not result in recovery of either more or less than the fixed costs of providing such service. In addition, it is not likely that reductions in retail sales as a result of EE programs will result in increased opportunity for offsystem sales. However, if increased off-system sales occur, nearly all profits from such sales allocable to the North Carolina retail jurisdiction are flowed to customers through base rates and the BPM profit-sharing rider.

With respect to the Commission's question on procedures, the Company expects the measurement and verification process to identify areas where there may have been increases in energy usage. In addition, with respect to fuel switching, although the Company does not expect that to occur, the Company will be able to track what equipment was replaced by new higher efficiency electric equipment. A search of this data will indicate whether or not any incentives led to a customer switching an end use or process from one fuel source to another.

Responding Witness: Dr. Richard Stevie

Respectfully submitted this 10<sup>th</sup> day of August 2009.

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# COUNSEL FOR DUKE ENERGY CAROLINAS, LLC

Attachment 1-1

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Company Name	Non-Participating Accounts
201 LLC	1
214 NORTH TRYON STREET LLC	-
400 S TRYON ST INVESTORS, LLC	1
AIR PRODUCTS & CHEMICALS, INC	1
ALLSTATE INSURANCE	1
ALLVAC, A DIVISION OF TDY INDUSTRIES, INC	1
ATRIUM WINDOWS & DOORS	10
BAKER INDUSTRIES	1
BANK OF AMERICA	6
BB&T	3
BOC GASES	1
CARGILL, INCORPORATED	4
CERTAINTEED CORP	1
CHILDRESS KLEIN PROP	- 14
CITY OF WINSTON SALEM	1
CONBRACO INDUSTRIES	-
CORMETECH INC	1
CORNING INC	6
E I DUPONT CO	1
FAS CONTROLS	1
FOOD LION	190
GENERAL ELECTRIC	1
GERDAU AMERISTEEL US INC	2
GLEN RAVEN INC	2
GOODYEAR TIRE & RUBBER CO	1
HINES INTEREST LIMITED PARTNERSHIP	2
INTERNATIONAL TEXTILE GROUP INC	3
JACKSON PAPER MFG CO	1
KEATING GRAVURE USA, LLC	1
KIMBERLY CLARK	2
L S STARRETT CO	4
LICHTIN/TORINGDON	6
LINCOLN HARRIS	1
MERCK & CO., INC.	1
METROMONT CORPORATION	2
MT HOPE IND INC	1
MT HOPE MACH CO	1
NOVANT HEALTH INC	8

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OMNISOURCE SOUTHEAST	2
ORACLE FLEXIBLE PACKAGING	3
PERFORMANCE FIBERS OPERATIONS INC	4
PINE HALL BRICK COMPANY, INC	2
PPG INDUSTRIES INC	5
PRESBYTERIAN HEALTHCARE	9
PROCTER & GAMBLE MFG	4
RJ REYNOLDS TOBACCO CO	6
ROWAN REGIONAL MEDICAL CENTER	3
SCHLEGEL CORPORATION	1
SEALED AIR CORPORATION	1
SONOCO INC	4
SOUTH GRANVILLE WATER & SEWER AUTHORITY	3
SUN CHEMICAL CORP	1
THE TIMKEN COMPANY	1
TYCO ELECTRONICS CORPORATION	14
UNC - CHAPEL HILL	8
UNIFI INC	6
UNILIN FLOORING NC LLC	1
UNIVERSAL FOREST PRODUCTS	8
WACHOVIA BANK	12
WESTERN CAROLINA UNIVERSITY	1
WILKES COUNTY BOARD OF EDUCATION	6
Total Accounts	391

ATTACHMENT 2-1

PAGE 1 (	of.	2
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2009		2010			2011			2012
an Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec J	Jan Feb Mar Apr May J	Jun Jul Aug	Sep Oct Nov Dec	Jan Feb Mar Apr May	Jun Jul Aug	Sep Oct Nov Dec J	an Feb Mar Apr	May Jun Jul Aug
Bill Rider 1	File Rider 2	Hearing	Bill Rider 2	File Rider 3	Hearing	Bill Rider 3	File Rider	4 Hearing
	Vintage 1				Vintage 2		···-	Vintage 3
Rid	ler EE 1		٦					
Est. avoided cost revenue requirement	nt Vintage 1 (see notes 1 ar	nd 2)		Rider EE 2				
Estimated net lost revenues Vintage 1	1 - year 1 (see notes 1 and 2	2}	Estimated net lost re	venues Vintage 1 - year 2		Rider EE 3		
			Est. avoided costs re	venue requirement Vintag	ge 2	Participation updated	net lost revenues Vi	ntage 1 - year 3
			Estimated net lost re	venues Vintage 2 - year 1		Participation Adjustme	ent (true-up) Vintag	e 1
						Estimated net lost rev	enues Vintage 2 - ye	ar 2
						Est. avoided costs rev	enue requriement V	intage 3
						Estimated net lost rev	enues Vintage 3 - ye	ar 1
Notes:								
1 Vintage years normally span January through Decembe	er, with the exception of Vir	ntage 1.						

2 Rider EE was implemented for Vintage 1 on June 1, 2009, subject to refund, for energy efficiency programs only. The DSM component of Rider EE is expected to be implemented upon Commission final approval of Rider EE. As a result, Vintage 1 is a 19 month period for

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energy efficiency programs, and may be more than 12 months for demand side management, depending on the date of Commission approval. Rider EE 1 may be adjusted during the billing period as required to comply the Commission's final approval.

3 The cost of new pilots or programs approved by the Commission during a Vintage year that were not estimated in the proposed rider for a Vintage year will be will be included in the annual filing process for that Vintage, as well as the final true-up upon measurement and verification.

4 For earnings cap computations, the total avoided costs savings target will be computed based on the four-year period January 1, 2010 through December 31, 2013.

#### ATTACHMENT 2-1

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20	3			2014							20:	15	-		
ep Oct Nov Dec Jan Feb Mar Apr May Jun	Jul Aug Sep Oct Nov Dec	Jan Feb	Mar Apr	May Jun Jui	Aug Se	ep Oct Nov	Dec Jan	Feb Ma	r Apr	May	Jun	A lul	ug S	ep O	t No
Sill Rider 4 File Rider 5 Hea	ing Bill Rider 5		File Rider			ill Rider 6					·				
Vinta	je 4														
		-													
Rider EE 4															
Participation updated net lost revenues Vintage 2 - y		Rido	er EE 5												
									-						
Participation Adjustment (true-up) Vintage 2	Participation updat	ted net lost i	revenues Vin	ntage 3 - vear 3				Rider EE	6						
Estimated net lost revenues Vintage 3 - year 2									-						
sumated net lost revenues vintage 5 - year 2	Participation Adjus	tment (true-	-up) Vintage	÷ .		ctual net lost	revenues	Vintage 4	- year	3			_		
Est. avoided costs revenue requirement Vintage 4	Participation Adjus Estimated net lost	-	•••••	3	A	ctual net lost inal true-up V		-	•		nent/	verific	ation		
<b>-</b> -		-	•••••	3	A			-	•		nent/	verific	ation		

#### ATTACHMENT 3-1

\$ in N	Aillions
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	Admini	stration	
Year 1	Year 2	Year 3	Year 4
\$6.5	\$7.9	\$15.5	\$25.7
Imp	lementatio	n / Assessm	ents
Year 1	Year 2	Year 3	Year 4
\$2.4	\$3.4	\$8.2	\$14.0
\$1.6	\$2.3	\$5.6	\$10.8
\$0.2	\$0.2	\$0.2	\$0.2
\$0.5	\$0.3	\$0.3	\$0.3
\$1.7	\$1.8	\$3.7	\$5.6
\$1.8	\$1.9	\$1.6	\$2.2
\$3.1	\$3.3	\$6.5	\$9.7
	Incer	ntives	
Year 1	Year 2	Year 3	Year 4
\$0.0	\$0.0	\$0.0	\$0.0
\$0.0	\$0.0	\$0.0	\$0.0
\$6.0	\$6.0	\$6.0	\$6.0
\$3.9	\$9.9	\$15.2	\$15.3
\$0.0	\$0.0	\$0.0	\$0.0
\$2.7	\$3.1	\$4.7	\$7.4
\$4.9	\$5.6	\$11.5	\$17.4
	То	tal	
Year 1	Year 2	Year 3	Year 4
	\$6.5 Imp Year 1 \$2.4 \$1.6 \$0.2 \$0.5 \$1.7 \$1.8 \$3.1 Year 1 \$0.0 \$0.0 \$6.0 \$3.9 \$0.0 \$2.7	Year 1 Year 2   \$6.5 \$7.9   Implementation   Year 1 Year 2   \$2.4 \$3.4   \$1.6 \$2.3   \$0.2 \$0.2   \$0.5 \$0.3   \$1.7 \$1.8   \$1.8 \$1.9   \$3.1 \$3.3   Incer   Year 1 Year 2   \$0.0 \$0.0   \$6.0 \$6.0   \$3.9 \$9.9   \$0.0 \$0.0   \$2.7 \$3.1   \$4.9 \$5.6	\$6.5 \$7.9 \$15.5   Implementation / Assessm   Year 1 Year 2 Year 3   \$2.4 \$3.4 \$8.2   \$1.6 \$2.3 \$5.6   \$0.2 \$0.2 \$0.2   \$0.5 \$0.3 \$0.3   \$1.7 \$1.8 \$3.7   \$1.8 \$1.9 \$1.6   \$3.1 \$3.3 \$6.5   Incentives   Year 1 Year 2 Year 3   \$0.0 \$0.0 \$0.0   \$0.0 \$0.0 \$0.0   \$6.0 \$6.0 \$6.0   \$3.9 \$9.9 \$15.2   \$0.0 \$0.0 \$0.0   \$2.7 \$3.1 \$4.7

# Duke Energy Carolinas, LLC Docket E-7, Sub 831 Responses to Pre-Hearing Order Requiring Verified Information, Question 7 85% Achievement, \$ in Thousands

	1	2	3	<u>4</u>	<u>5</u>	<u>6</u>
Сотро	onent Revenue	s by Prog	ram		<u> </u>	
Residential Energy Assessments						
Avoided Cost Based Revenues	\$1,751	\$1,934	\$4,114	\$6,531	\$0	S
Net Lost Revenues	\$834	\$1,792	\$3,773	\$5,940	\$5,074	\$3,11
Residential Smart Saver® Energy Efficiency	/					
Avoided Cost Based Revenues	\$5,431	\$5,915	\$5,090	\$7,917	\$0	\$
Net Lost Revenues	\$2,682	\$5,714	\$7,930	\$8,279	\$5,290	\$3,18
Low Income Energy Efficiency and Weather	rization Assistar	ice				
Avoided Cost Based Revenues	\$2,288	\$2,388	\$4,019	\$6,331	\$0	\$
Net Lost Revenues	\$1,189	\$2,454	\$4,429	\$6,025	\$4,840	\$2,89
Energy Efficiency Education Program for So	chools					
Avoided Cost Based Revenues	\$3,586	\$4,560	\$10,657	\$17,968	\$0	\$
Net Lost Revenues	\$1,702	\$3,768	\$8,195	\$13,358	<b>\$</b> 11, <b>4</b> 98	\$7,11
Power Manager						
Avoided Cost Based Revenues	\$8,247	\$8,453	\$8,664	\$8,881	\$0	\$
Net Lost Revenues	\$0	\$0	\$0	\$0	\$0	\$
Total Residential						
Avoided Cost Based Revenues	\$21,302	\$23,249	\$32,544	\$47,627	\$0	\$
Net Lost Revenues	\$6,407	\$13,728	\$24,327	\$33,602	\$26,702	\$16,31
Non-Residential Programs						
Smart Saver® for Non-Residential Custome	rs					
Avoided Cost Based Revenues	\$6,123	\$6,991	\$14,823	\$23,220	\$0	\$
Net Lost Revenues	\$1,046	\$2,249	\$4,622	\$7,321	\$6,100	\$3,50
Non-Residential Energy Assessments						
Avoided Cost Based Revenues	\$0	\$0	\$0	\$0	\$0	\$
Net Lost Revenues	\$0	\$0	\$0	\$0	\$0	\$
Power Share®						
Avoided Cost Based Revenues	\$2,905	\$7,702	\$12,074	\$12,376	\$0	\$
Net Lost Revenues	\$0	\$0	\$0	\$0	\$0	\$
Total Non-Residential						
Avoided Cost Based Revenues	\$9,028	\$14,693	\$26,897	\$35,596	\$0	\$
Net Lost Revenues	\$1,046	\$2,249	\$4,622	\$7,321	\$6,100	\$3,50

Total Residential and Non-Residential

Total						
Avoided Cost Based Revenues	\$30,330	\$37, <del>9</del> 42	\$59,441	\$83,223	\$0	\$0
Net Lost Revenues	\$7,454	\$15,977	\$28,950	\$40,923	\$32,802	\$19,816

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Notes:

1 Does not include Gross Receipts Tax or Regulatory Fee

2 Revenues are North Carolina Only

# Duke Energy Carolinas, LLC Docket E-7, Sub 831 Responses to Pre-Hearing Order Requiring Verified Information, Question 7 100% Achievement, \$ in Thousands

	1	2	3	4	5	<u>6</u>
Compo	onent Revenue	s by Prog	ram			
Residential Energy Assessments						
Avoided Cost Based Revenues	\$2,060	\$2,275	\$4,839	\$7,684	\$0	\$
Net Lost Revenues	\$981	\$2,108	\$4,439	\$6,989	\$5,969	\$3,66
Residential Smart Saver® Energy Efficiency	1					
Avoided Cost Based Revenues	\$6,389	\$6,959	\$5,988	\$9,314	\$0	\$1
Net Lost Revenues	\$3,155	\$6,723	\$9,329	\$9,740	\$6,224	\$3,74
Low Income Energy Efficiency and Weather	rization Assistar	nce				
Avoided Cost Based Revenues	\$2,691	\$2,809	\$4,728	\$7,448	\$0	\$
Net Lost Revenues	\$1,399	\$2,887	\$5,211	\$7,088	\$5,694	\$3,40
Energy Efficiency Education Program for So	hools					
Avoided Cost Based Revenues	\$4,219	\$5,365	\$12,538	\$21,138	\$0	\$
Net Lost Revenues	\$2,002	\$4,433	\$9,642	\$15,715	\$13,527	\$8,37
Power Manager						
Avoided Cost Based Revenues	\$9,702	\$9,945	\$10,193	\$10,448	\$0	\$
Net Lost Revenues	\$0	\$0	\$0	\$0	\$0	\$
Total Residential						
Avoided Cost Based Revenues	\$25,061	\$27,352	\$38,287	\$56,032	\$0	\$
Net Lost Revenues	\$7,538	\$16,150	\$28,620	\$39,532	\$31,414	\$19,18
Non-Residential Programs						
Smart Saver® for Non-Residential Custome	ers					
Avoided Cost Based Revenues	\$7,204	\$8,225	\$17,439	\$27,318	\$0	\$
Net Lost Revenues	\$1,231	\$2,646	\$5,438	\$8,612	\$7,176	\$4,12
Non-Residential Energy Assessments						
Avoided Cost Based Revenues	\$0	\$0	\$0	\$0	\$0	\$
Net Lost Revenues	\$0	\$0	\$0	\$0	\$0	\$
Power Share®						
Avoided Cost Based Revenues	\$3,417	\$9,061	\$14,204	\$14,560	\$0	\$
Net Lost Revenues	\$0	\$0	\$0	\$0	\$0	\$
Total Non-Residential						
Avoided Cost Based Revenues	\$10,621	\$17,286	\$31,644	\$41,877	\$0	\$
Net Lost Revenues	\$1,231	\$2,646	\$5,438	\$8,612	\$7,176	\$4,12

Total Residential and Non-Residential

1003						
Avoided Cost Based Revenues	\$35,682	\$44,638	\$69,930	\$97,909	\$0	\$0
Net Lost Revenues	\$8,769	\$18,796	\$34,058	\$48,144	\$38,590	\$23,313

Notes:

1 Does not include Gross Receipts Tax or Regulatory Fee

2 Revenues are North Carolina Only

#### ATTACHMENT 8-1

Projected Avoided Capacity and Energy Costs

		Year								All Years	
Avoided Capacity Costs	Total		1		2		3		4	% Energy Efficiency	% DSM
Residential Programs							-				
Energy Efficiency Education program for Schools	\$ 36,369,251	\$	2,829,275	\$	4,289,029 \$	\$	10,682,246	\$	18,568,700	100%	
Low Income Energy Efficiency and Weatherization Assistance	\$ 9,262,381	\$	1,313,600	\$	1,451,714 \$	\$	2,505,103	\$	3,991,963	<u>100%</u>	
Residential Energy Assessments	\$ 10,120,601	\$	1,258,887	\$	1,417,733 \$	\$	2,937,061	\$	4,506,918	100%	
Residential Smart \$aver <sup>®</sup> Energy Efficiency	\$ 16,850,699	\$	3,363,172	\$	3,800,927 \$	\$	3,792,639	\$	5,893,960	100%	
Total Residential Energy Efficiency Avoided Capacity Costs	\$ 72,602,928	\$	8,764,934	\$	10,959,403 \$	\$	19,917,050	\$	32,961,541		
Power Manager	\$ 72,555,853	\$	17,472,746	\$	17,909,565 \$	\$	18,357,304	\$	18,816,237		100%
Total Residential Avoided Capacity Costs	\$ 145,158,779	\$	26,237,680	\$	28,868,968 \$	\$	38,274,354	\$	51,777,778		
Non-Residential Programs											
Non-Residential Energy Assessments	\$ -	\$	-	\$	- \$	\$	-	\$	-	100%	
Smart \$aver* for Non-Residential Customers	\$ 77,148,765	\$	8,728,862	\$	10,404,320 \$	\$	22,438,479	\$	35,577,104	100%	
Total Non-Residential Energy Efficiency Avoided Capacity Costs	\$ 77,148,764	\$	8,728,862	\$	10,404,320 \$	\$	22,438,479	\$	35,577,104		
Power Share®	\$ 74,275,042	\$	6,154,102	\$	16,318,404 \$	\$	25,581,499	\$	26,221,036		100%
Total Non-Residential Avoided Capacity Costs	\$ 151,423,805	\$	14,882,964	\$	26,722,724 \$	\$	48,019,977	\$	61,798,140	-	
Total Energy Efficiency Avoided Capacity Costs	\$ 149,751,692	\$	17,493,795	\$	21,363,723 \$	\$	42,355,528	\$	68,538,645		
Total DSM Avoided Capacity Costs	\$ 146,830,892	\$	23,626,848	\$	34,227,969 \$	\$	43,938,802	\$	45,037,273		
Total Avoided Capacity Costs	\$ 296,582,585	\$	41,120,644	\$	<b>5</b> 5,591,692 \$	\$	86,294,331	\$	113,575,918		
Percent of Avoided Capacity Costs for Energy Efficiency Programs	50.5%		42.5%		38.4%		49.1%		60.3%		
Percent of Avoided Capacity Costs for DSM Programs	49.5%		57.5%		61.6%		50.9%		39.7%		
Avoided Energy Costs											
Residential Programs											
Energy Efficiency Education program for Schools	\$ 107,883,692		10,861,756		13,432,011		31,122,844		52,467,080	100%	
Low Income Energy Efficiency and Weatherization Assistance	\$ 51,290,935		7,425,189		7,882,212 \$		13,696,233		22,287,298	100%	
Residential Energy Assessments	\$ 45,178,565	-	5,440,471		6,029,057		12,929,942		20,779,094	100%	
Residential Smart \$aver® Energy Efficiency	\$ 84,749,633		18 <b>,008,8</b> 51	-	19,706,653		18,212,867		28,821,261	100%	
Total Residential Energy Efficiency Avoided Energy Costs	\$ 289,102,819		41,736,267		47,049,933	Ş	75,961,886	\$	124,354,733		
Power Manager	\$ -	\$	-	\$		\$	-	\$	-		100%
Total Residential Avoided Energy Costs	\$ 289,102,819	\$	41,736,267	\$	47,049,933	\$	75,961,886	\$	124,354,733		

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#### ATTACHMENT 8-1

													Page 2 of 2
Non-Residential Programs													
Non-Residential Energy Assessments	Ş	-	\$	-	\$	-	Ş	-	\$	-	_	00%	
Smart \$aver <sup>®</sup> for Non-Residential Customers	\$	167,926,160		20,545,785	-		\$	48,555,650	•	75,670,737	10	00%	
Total Non-Residential Energy Efficiency Avoided Energy Costs	\$	167,926,159		20,545,785		23,153,987	\$	48,555,650		75,670,737			
Power Share <sup>®</sup>	\$		,	-	\$	-	\$	-	\$	•			100%
Total Non-Residential Avoided Energy Costs	\$	167,926,159	\$	20,545,785	\$	23,153,987	\$	48,555,650	\$	75,670,737			
Total France Efficiency Ausided France Casts		457 030 070 (		63 383 653	÷	70 202 020	~	124 513 525		200 025 474			
Total Energy Efficiency Avoided Energy Costs	Ş	457,028,978		62,282,052		70,203,920	\$ \$	124,517,535		200,025,471			
Total DSM Avoided Energy Costs	Ş		-	-	\$	-	•	-	\$	-			
Total Avoided Energy Costs	\$	457,028,978	\$	62,282,052	Ş	70,203,920	\$	124,517,535	\$	200,025,471			
Percent of Avoided Energy Costs for Energy Efficiency Programs		100.0%		100.0%		100.0%		100.0%		100.0%			
Percent of Avoided Energy Costs for DSM Programs		0.0%		0.0%		0.0%		0.0%		0.0%			
Total Avoided Costs													
<u>Residential Programs</u>				42 604 024	~	17 701 040	~	44 005 000		34 435 344			
Energy Efficiency Education program for Schools	Ş	144,252,943		13,691,031		17,721,040		41,805,090		71,035,780		00%	
Low Income Energy Efficiency and Weatherization Assistance	Ş	60,553,316		8,738,789		9,333,927		16,201,336	-	26,279,261		00%	
Residential Energy Assessments	\$	55,299,166		6,699,358		7,446,790	-	15,867,003		25,286,012		00%	
Residential Smart \$aver® Energy Efficiency	Ş	101,600,331	-	21,372,022		23,507,580		22,005,506		34,715,221	1	00%	
Total Residential Energy Efficiency Avoided Costs	Ş	361,705,747		50,501,201		58,009,337		95,878,935	-	157,316,274			
Power Manager	\$	72,555,853		17,472,746		17,909,565		18,357,304		18,816,237			100%
Total Residential Avoided Costs	\$	434,261,599	Ş	67,973,947	Ş	75,918,902	Ş	114,236,239	\$	176,132,511			
Non-Residential Programs													
Non-Residential Energy Assessments	Ś		Ś	-	Ś	-	Ś	-	Ś		1	00%	
Smart Saver® for Non-Residential Customers	Ś	245,074,925	•	29,274,647	•	33,558,306	•	70,994,129	Ś	111,247,841	1	00%	
Total Non-Residential Energy Efficiency Avoided Costs	Ś	245,074,923		29,274,647	-	33,558,306	-	70,994,129	Ś	111,247,841			
Power Share <sup>®</sup>	Ś	74,275,042	-	6,154,102	-	16,318,404	-	25,581,499		26,221,036			100%
Total Non-Residential Avoided Costs	\$	319,349,964		35,428,749		49,876,711		96,575,627		137,468,877			
								-					
Total Energy Efficiency Avoided Costs	\$	606,780,670	\$	79,775,848	\$	91,567,643	\$	166,873,064	\$	268,564,116			
Total DSM Avoided Costs	\$	146,830,892	\$	23,626,848	\$	34,227,969	\$	43,938,802	\$	45,037,273			
Total Avoided Costs	\$	753,611,563	\$	103,402,696	\$	125,795,612	\$	210,811,866	\$	313,601,388			
Descent of August day Contrainer Stillinger, Descent		80 FM		77 54/		70 04/		70 00/		05 64			
Percent of Avoided Costs for Energy Efficiency Programs		80.5%		77.2%		72.8%		79.2%		85.6%			
Percent of Avoided Costs for DSM Programs		19.5%		22.8%		27.2%		20.8%		14.4%			

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#### ATTACHMENT 8-1

#### Workpapers of Richard G. Stevie

#### Avoided Capacity Costs as Percent of Total Avoided Costs **Residential Programs Energy Efficiency Education program for Schools** 25.2% 20.7% 24.2% 25.6% 26.1% Low Income Energy Efficiency and Weatherization Assistance 15.3% 15.0% 15.6% 15.5% 15.2% **Residential Energy Assessments** 18.3% 18.8% 19.0% 18.5% 17.8% Residential Smart Saver® Energy Efficiency 16.6% 16.2% 15.7% 17.2% 17.0% **Total Residential Energy Efficiency Avoided Costs** 20.1% 17.4% 18.9% 21.0% 20.8% Power Manager 100.0% 100.0% 100.0% 100.0% 100.0% Total Residential Avoided Costs 33.4% 38.6% 38.0% 33.5% 29.4% **Non-Residential Programs** Non-Residential Energy Assessments Smart Saver\* for Non-Residential Customers 31.5% 29.8% 31.0% 31.6% 32.0% 31.5% **Total Non-Residential Energy Efficiency Avoided Costs** 29.8% 31.0% 31.6% 32.0% Power Share® 100.0% 100.0% 100.0% 100.0% 100.0% **Total Non-Residential Avoided Costs** 47.4% 42.0% 53.6% 49.7% 45.0% **Total Energy Efficiency Avoided Costs** 24.7% 21.9% 23.3% 25.4% 25.5% Total DSM Avoided Costs 100.0% 100.0% 100.0% 100.0% 100.0% **Total Avoided Costs** 39.4% 39.8% 44.2% 40.9% 36.2% **Avoided Energy Costs as Percent of Total Avoided Costs Residential Programs Energy Efficiency Education program for Schools** 74.8% 79.3% 75.8% 74.4% 73.9% Low Income Energy Efficiency and Weatherization Assistance 84.7% 85.0% 84.4% 84.5% 84.8% **Residential Energy Assessments** 81.7% 81.2% 81.0% 81.5% 82.2% **Residential Smart Saver® Energy Efficiency** 83.4% 84.3% 83.8% 82.8% 83.0% **Total Residential Energy Efficiency Avoided Costs** 79.9% 82.6% 81.1% 79.2% 79.0% Power Manager 0.0% 0.0% 0.0% 0.0% 0.0% **Total Residential Avoided Costs** 66.6% 61.4% 62.0% 66.5% 70.6% **Non-Residential Programs** . Non-Residential Energy Assessments Smart Saver® for Non-Residential Customers 68.5% 70.2% 69.0% 68.4% 68.0% **Total Non-Residential Energy Efficiency Avoided Costs** 68.5% 70.2% 69.0% 68.4% 68.0% Power Share® 0.0% 0.0% 0.0% 0.0% 0.0% **Total Non-Residential Avoided Costs** 52.6% 58.0% 46.4% 50.3% 55.0% **Total Energy Efficiency Avoided Costs** 78.1% 75.3% 76.7% 74.6% 74.5% **Total DSM Avoided Costs** 0.0% 0.0% 0.0% 0.0% 0.0% **Total Avoided Costs** 60.6% 60.2% 55.8% 59.1% 63.8%

#### ATTACHMENT 15-1

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15. Farmer Exhibit No. 1

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	Filed save-a-watt Proposal (Note 1)							Settlement Agreement (Notes 2 - 4)									Differences						
Line		Residential		<u>Non</u> idential	+		- B	esidential	+	<u>Non</u> Residential	┼─		Ne	Lost	+		-+			╉────		Lin	
No.	Year	Programs	_	grams		Total	Ē	rograms		Programs	<u>Ť                                    </u>	ubtotal	Revenues Total			Total		Amount		Perci	nt	No	
	<u>[A]</u>	(B)	<b> </b>	(Ç)		_[D][		(E)		(F)	<b>—</b>	_( <u>G</u> )	( <u>H</u> )( <u>H</u> )( <u>H</u> )			[J]							
1	1	\$ 25.9	<u>   s</u>	37.9	\$	63.8	\$	18.4	\$	13.0	5	31.4	\$	7.7	\$	39.1		\$	_(24.7)	[(3	<u>9.9%)</u>	11	
2	2	\$ 33.0	\$	48.5	\$	81.5	\$	22.4	\$	16.9	5	39.3	\$	16.5	\$	55.8	┉╼┿	\$	(25.7)	(3	1.6%)	2	
3	3	\$ 37.9	\$	57.7	\$	95.6	\$	33.8	\$	27.7	5	61.5	\$	29.9	\$	91.4	-+	\$	_(4.1)	<b>}</b> −	<u>4.3%</u> )	3	
4	4	<u>\$ 43.5</u>	\$	<u>57.7</u>	\$	101.2	<u>\$</u>	<u>49.4</u>	<u>\$</u>	36.7	5	86.1	\$	42.3	\$	128.4		\$	27.2	2	<u>6.9</u> %	4	
5		<u>\$ 140.3</u>	5	<u>201.9</u>	<u>\$</u>	342.1	<u>s</u>	124.0	<u>\$</u>	94.2	1	218.2	\$	96.5	\$	314.8		\$	[27.4]		<u>8.0</u> %)	5	
	Notes:								-		+		<b> </b>					•					
		sal conservation				ed over the	useful	life of the me	asu	re, thus the fou	r yea	r view does	not re	present th	ne tota	al cost that	woul	ld hav	/e	Į			
	(2) Settlement applicable to v recovery mech lost revenues : (3) Revenues,	r the Company's Agreement reve intage years 3 a anism or an ord subject to recove including Net Lo a-watt proposal (	enues w and 4 wi er in a g ery by h ost Rev	ill be subj ll extend 2 general rat lorth Caro enues, an	ect to 2 year te prov lima c e set a	s beyond the cedding that ustomers in at 85% achie	e 4-yea l provid years f evemei	ar cost recover les for the re ive and six ve nt	very Incov Vill to	period unless te ery of net lost ro ptal approximate	xmin sven sly \$5	ated early d ues. The C i4 million at	ue to a compar 85% ol	pproval o y estimat	of a de es tha	ecoupling or It the combi	r alte ined	rnativ	e				

STATE OF NORTH CAROLINA ) COUNTY OF MECKLENBURG )

J. DANNY WILES, being first duly sworn, deposes and says:

That he is Vice President, Franchised Electric & Gas Accounting for Duke Energy Business Services, LLC; that he has read the foregoing Responses of Duke Energy Carolinas, LLC to the North Carolina Utilities Commission's July 30, 2009 Prehearing Order Requiring Verified Information (the "Responses"), and knows the contents of Responses for which he is the Responding Witness; that the same are true as to matters stated therein on information and belief, and as to those matters he believes them to be true.

J. Darfy Wiles

Sworn to and subscribed before me

This  $1^{\text{th}}$  day of August, 2009.

My Commission Expires: 1/28/2014

ROSA M. GOSS NOTARY PUBLIC Mecklenburg County, North Carolina My Commission Expires January 28, 2014

STATE OF NORTH CAROLINA	)
COUNTY OF MECKLENBURG	)

RAIFORD L. SMITH, being first duly sworn, deposes and says:

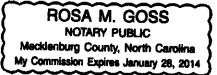
That he is Director, Strategy and Collaboration for Duke Energy Business Services, LLC; that he has read the foregoing Responses of Duke Energy Carolinas, LLC to the North Carolina Utilities Commission's July 30, 2009 Pre-hearing Order Requiring Verified Information (the "Responses"), and knows the contents of Responses for which he is the Responding Witness; that the same are true as to matters stated therein on information and belief, and as to those matters he believes them to be true.

iford L. Smith

Sworn to and subscribed before me This  $\underline{(e)}^{\text{th}}$  day of August, 2009.

Notary Public

My Commission Expires: 1/28 2014



STATE OF NORTH CAROLINA	)
COUNTY OF MECKLENBURG	)

RICHARD G. STEVIE, being first duly sworn, deposes and says:

That he is Managing Director of Customer Market Analytics for Duke Energy Business Services, LLC; that he has read the foregoing Responses of Duke Energy Carolinas, LLC to the North Carolina Utilities Commission's July 30, 2009 Pre-hearing Order Requiring Verified Information (the "Responses"), and knows the contents of Responses for which he is the Responding Witness; that the same are true as to matters stated therein on information and belief, and as to those matters he believes them to be true.

Richard G. Stevie

Sworn to and subscribed before me This  $\underline{(\varphi)}^{\text{th}}$  day of August, 2009.

Notary Public

My Commission Expires: 1/28/2014

ROSA M. GOSS NOTARY PUBLIC Meddenburg County, North Carolina My Cemmission Expires January 28, 2014

-

STATE OF INDIANA ) ) COUNTY OF Hendricks

STEPHEN M. FARMER, being first duly sworn, deposes and says:

That he is a self-employed independent contractor providing rate and regulatory consulting servies to Duke Energy Carolinas, LLC; that he has read the foregoing Responses of Duke Energy Carolinas, LLC to the North Carolina Utilities Commission's July 30, 2009 Pre-hearing Order Requiring Verified Information (the "Responses"), and knows the contents of Responses for which he is the Responding Witness; that the same are true as to matters stated therein on information and belief, and as to those matters he believes them to be true.

Stephen M. Farmer

Sworn to and subscribed before me

This **6**<sup>th</sup> day of August, 2009.

Notary Public

My Commission Expires: April 17, 2014

#### CERTIFICATE OF SERVICE DOCKET NO. E-7, Sub 831

I certify that a copy of Duke Energy Carolinas' Responses to the Commission's Prehearing Order Requiring Verified Information was sent by regular U.S. mail or electronic distribution to the persons listed below.

This, the 10<sup>th</sup> day of August 2009.

Robert W. Kayl

Robert W. Kaylor LAW OFFICES OF ROBERT W. KAYLOR, P.A. 3700 Glenwood Avenue, Suite 330 Raleigh, North Carolina 27612 919.828.5250