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PLACE: Dobbs Building, Raleigh, North Carolina DATE: August 19, 2009 DOCKET NO.: E-7, Sub 831 TIME IN SESSION: 9:00 A.M. TO 12:25 P.M. BEFORE: Chairman Edward S. Finley, Jr. Presiding Commissioner Lorinzo L. Joyner Commissioner Robert V. Owens, Jr. Commissioner William T. Culpepper, III IN THE MATTER OF: Duke Energy Carolinas, LLC: Petition for Approval of Save-a-Watt Approach, Energy Efficiency Rider and Portfolio of Energy Efficiency Programs VOLUME I APPEARANCES: ÷ FOR DUKE ENERGY CAROLINAS, LLC: Catherine E. Heigel Associate General Counsel Duke Energy Carolinas, LLC 526 S. Church Street, ECO3T Charlotte, NC 28201 Lara S. Nichols Associate General Counsel Duke Energy Corporation 526 S. Church Street Charlotte, NC 28210 Robert W. Kaylor Law Office of Robert W. Kaylor, P.A. 3700 Glenwood Avenue, Suite 330 Raleigh, NC 27612

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E-7, Sub 831 - Volume 1 FOR NORTH CAROLINA SUSTAINABLE ENERGY ASSOCIATION: Kurt J. Olson Pilot Mills 111 Haynes Street, Suite 109 Raleigh, North Carolina FOR CAROLINA INDUSTRIAL GROUP FOR FAIR UTILITY RATES (CIGFUR) AND AIR PRODUCTS & CHEMICALS, INC.: Ralph McDonald Bailey & Dixon, L.L.P. Post Office Box 1351 Raleigh, North Carolina 27602-1351 FOR THE CAROLINA UTILITY CUSTOMER ASSOCIATION, INC.: Robert F. Page Crisp, Page & Currin, LLP Suite 205, 4010 Barrett Drive Raleigh, NC 27609

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ĥ E-7, Sub 831 - Volume 1 1 PROCÉEDINGS CHAIRMAN FINLEY: Let's come on the 2 record, please. Good morning. My name is Edward 3 S. Finley, Jr, and with me today are Commissioners 4 5 Robert B. Owens, Jr, Lorenzo L. Joyner, and 6 William T. Culpepper, III. I now call for hearing 7 Docket No. E-7, Sub 831, which is the matter of 8 Duke Energy Carolinas Application for Approval of 9 the Save-a-watt Approach, Energy Efficiency Rider, and Portfolio of Energy Efficiency Programs filed 10 on May 7, 2007. 11 12 In compliance with the requirements of 13 Chapter 1, 38(a) and the State Government Ethics 14 Act, I remind all members of the Commission of 15 their duty to avoid conflicts of interest and inquire whether any member of the Commission has a 16 17 known conflict of interest with regard to any of the matters coming before us this morning. 18 19 (No response.) 20 CHAIRMAN FINLEY: There appearing to be 21 none, we will proceed. 22 On February 26, 2009, the Commission 23 issued it's order in this docket resolving certain 24 issues, requiring information on unsettled matters,

E-7, Sub 831 - Volume 1 and allowing the proposed rider to become effective

2 subject to refund. Also, on February 26, 2009 an 3 errata order was issued replacing the supplemental information section of the February 26 order 4 5 beginning on page 60 and ending on page 63. On June 12, 2009 the stipulating parties 6 7 -- Duke Energy Carolinas, LLC, Southern Alliance 8 for Clean Energy, Environmental Defense Fund, 9 Natural Resources Defense Council, Southern Environmental Law Center, and the Public Staff 10 filed an Agreement and Joint Stipulation of 11 12 Settlement. 13 On June 18, 2009, the Commission issued 14 an order scheduling a hearing to consider the 15 Agreement and Joint Stipulation of Settlement 16 August 12, 2009. 17 On July 2, 2009, the Commission issued an 18 order rescheduling hearing to August 19 of 2009 and 19 granting extensions of time to file testimony of 20 nonstipulated interveners to July 27, 2009 and 21 rebuttal testimony not later than Monday, August 22 10, 2009. 23

On June 9, 2009, testimony was filed by James S. McLawhorn of the Public Staff, John E.

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1	Wilson on behalf of the Environmental Defense Fund,
2	Natural Resources Defense Council, Southern
3	Alliance for Clean Energy, and the Southern
4	Environmental Law Center; and J. Danny Wiles,
5 .	Theodore E. Schultz, and Stephen M. Farmer on
6	behalf of Duke Energy Carolinas.
7	On July 2, 2009 testimony and exhibits
8	were filed by Michael C. Maness, Public Staff. On
9	July 27, 2009 Roger D. Colton filed supplemental
10	testimony on behalf of the North Carolina Justice
11	Center, AARP, NC Council of Churches, and Legal Aid
12	of North Carolina. On August 10, 2009 Raiford L.
13	Smith filed rebuttal testimony on behalf of Duke
14	Energy Carolinas, which was very short.
15	On July 30, 2009 the Commission issued
16	its pre-hearing order requiring verified
17	information in this docket. On August 10, 2009
18	Duke Energy filed its response to the Commission
19	pre-hearing order. On August 14, 2009 the
20	Commission issued its second pre-hearing order
21	requiring verified information and requesting the
22	environmental interveners and the Public Staff to
23	file verified statements not later than Tuesday,
24	August 18, 2009, which state whether those parties

NORTH CAROLINA UTILITIES COMMISSION

ų E-7, Sub 831 - Volume 1 are in agreement with the information filed by Duke 1 on August 10, 2009. 2 I believe that brings us up to the 3 present. It's good to see everybody. We were here 4 about a year ago, so everybody's a year older and, 5 hopefully, a year wise. Let's take appearances 6 7 beginning with the Company. 8 MR. KAYLOR: Thank you, Mr. Chairman and 9 Members of the Commission. Robert Kaylor appearing on behalf of Duke Energy Carolinas. 10 11 MS. HEIGEL: Good morning, Mr. Chairman and members of the Commission. Katherine Heigel 12 13 appearing on behalf of Duke Energy Carolinas as 14 well. 15 MS. NICHOLS: Good morning. Laura Nichols also on behalf of Duke Energy Carolinas. 16 17 MR. MCDONALD: This end? Good morning. 18 I'm Ralph McDonald for the Carolina Industrial 19 Group for Fair Utility Rates III and Air Products 20 and Chemicals. 21 MR. OLSON: Good morning. I'm Kurt I'm with the North Carolina Sustainable 22 Olson. 23 Energy Association. 24 MS. THOMSON: Good morning, Mr. Chairman,

10E-7, Sub 831 - Volume 1 members of the Commission. I'm Gudran Thompson 1 appearing on behalf of Environmental Defense Fund, 2 3 Natural Resources Defense Council, Southern 4 Alliance for Clean Energy and the Southern Environmental Law Center. 5 6 MR. HOLTZMAN: Good morning. My name is 7 Jack Holtzman. I'm with the North Carolina Justice 8 Center appearing today on behalf of the North Carolina Justice Center, AARP, Council of Churches, 9 10 and Legal Aid. MR. RUNKLE: John Runkle for the North 11 12 Carolina Waste Awareness and Reduction Network, NC 13 WARN. 14 MR. GREEN: Good morning. I'm Len Green 15 with the Attorney General's office appearing on behalf of the consumers. 16 17 MS. FENTRESS: Good morning. I'm 18 Kendrick Fentress with the Public Staff appearing 19 on behalf of the using and consuming public. 20 CHAIRMAN FINLEY: Welcome everyone. Anv 21 preliminary matters we need to address before we get started? 22 23 MR. KAYLOR: Thank you, Mr. Chairman. 24 Just a couple for Duke. First of all, we'd like to

E-7, Sub 831 - Volume 1 1 ask that Duke Energy Carolinas responses to the 2 August 10 order be marked as Duke Energy Carolinas' Hearing Exhibit No. 1. 3 (DUKE HEARING EXHIBIT NO. 1 4 WAS MARKED FOR IDENTIFICATION.) 5 6 CHAIRMAN FINLEY: Without objection it shall be so marked. 7 8 MR. KAYLOR: And we would also like to 9 announce to the Commission and the parties that Dr. 10 Stevie is here. He is not sponsoring testimony, 11 but he is familiar with a lot of the information 12 that went into the testimony and into the entire effort. And he is available if the Commission or 13 14 any of the parties need to call him to ask any 15 questions in the form of cross examination. 16 CHAIRMAN FINLEY: Very well. He's a 17 brave man to be here. Thank you. 18 MS. HEIGEL: He also sponsored several of 19 the answers to the responses that we've marked as 20 Hearing Exhibit 1. 21 CHAIRMAN FINLEY: Very well. Anything 22 else? MS. FENTRESS: The Public Staff would 23 24 make a similar motion with regard to Mr. Maness

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1		when we present his supplemental testimony.
2		CHAIRMAN FINLEY: Very well. All right.
3		Duke?
4		MS. HEIGEL: Thank you. At this time we
5		would call our first witness, Mr. Ted Schultz.
6		CHAIRMAN FINLEY: I think you probably
7		have already been sworn in this proceeding, but
8		just to make sure we'll swear everybody in.
9		(WHEREUPON, THEODORE E. SCHULTZ, WAS CALLED AS A
10	WITNESS	, DULY SWORN, AND TESTIFIED AS FOLLOWS:)
11	DIRECT	EXAMINATION BY MS. HEIGEL:
12	Q.	Mr. Schultz, would you please state your name and
13		business address for the record?
14	А.	Yes. Theodore Schultz, 526 South Church Street,
15		Charlotte, North Carolina.
16	Q.	And by whom are you employed and in what capacity?
17	А.	Duke Energy. I'm vice president of marketing and
18		energy efficiency.
19	Q.	Have you previously caused testimony to be filed in
20		this docket?
21	Α.	Yes, I have.
22	Q.	And did you cause to be prefiled most recently in
23		this docket settlement supporting testimony
24		consisting of 10 pages and Schultz Settlement
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	E-7, Su	13 15 831 - Volume 1
1		Exhibit No. 1 consisting of 34 pages?
2	А.	Yes, I have.
3	Q.	And can you please identify for the Commission what
4		Exhibit 1 to your settlement testimony is?
5	А.	Exhibit 1 is the Settlement Agreement.
6	Q.	Thank you. And do you have any changes or
7		corrections to your testimony at this time?
8	А.	I do not.
9		MS. HEIGEL: Mr. Chairman, at this time I
10		would move that Mr. Schultz's prefiled settlement
11		testimony be entered into the record as if given
12		orally from the stand and that his exhibit,
13		Settlement Exhibit No. 1 be marked for
14		identification.
15		CHAIRMAN FINLEY: Mr. Schultz's direct
16		prefiled testimony of June 9, 2009 shall be copied
17		into the record as if given orally from the stand
18		and his exhibit shall be marked for identification
19		as premarked in the file.
20		(THE PREFILED SETTLEMENT TESTIMONY OF THEODORE
21		SCHULTZ WILL BE COPIED INTO THE RECORD AS IF GIVEN
22		ORALLY FROM THE WITNESS STAND AND SCHULTZ
23		SETTLEMENT EXHIBIT NO. 1 WAS MARKED FOR
24		IDENTIFICATION.)

#### I. **INTRODUCTION AND PURPOSE**

### PLEASE STATE YOUR NAME, ADDRESS, AND POSITION WITH DUKE 1 Q. 2 **ENERGY BUSINESS SERVICES, LLC.**

My name is Theodore E. Schultz, and my business address is 526 South Church 3 Α. Street, Charlotte, North Carolina. I am Vice President - Energy Efficiency for Duke 4 5 Energy Business Services, LLC, a service company affiliate of Duke Energy Carolinas. LLC ("Duke Energy Carolinas" or the "Company") and am responsible for 6 leading energy efficiency initiatives across all retail markets served by Duke Energy 7 Corporation ("Duke Energy"), including Duke Energy Carolinas' service territory. I 8 9 am also responsible for Duke Energy's customer strategy and the development and 10 implementation of new products and services for the retail market.

### 11 0. ARE YOU THE SAME THEODORE E. SCHULTZ THAT PREVIOUSLY 12 SPONSORED TESTIMONY IN THIS PROCEEDING?

13 Α. Yes, I am.

#### 14 WHAT IS THE PURPOSE OF YOUR SETTLEMENT TESTIMONY? 0.

The purpose of my testimony is to: (1) provide an overview of the Agreement and 15 Α. Joint Stipulation, dated June 12, 2009 (the "Agreement" or the "Settlement 16 Agreement") entered into by and among Duke Energy Carolinas and Southern 17 18 Alliance for Clean Energy, Environmental Defense Fund, Natural Resources Defense 19 Council, and Southern Environmental Law Center (collectively, the "Environmental Intervenors"), and the Public Staff of the North Carolina Utilities Commission (the 20 "Public Staff") (collectively, the "Settling Parties"); (2) explain certain features of the 21 Agreement in detail; (3) compare and contrast those features to our initial proposal as 22





Settlement Testimony: THEODORE E. SCHULTZ -2-Duke Energy Carolinas, LLC NCUC Docket No. E-7, Sub 831

presented in previously filed testimony; and (4) provide my view as to why this Agreement is in the public interest.

### II. THE AGREEMENT AND JOINT STIPULATION TERMS

### **3 Q. PLEASE DESCRIBE SCHULTZ SETTLEMENT EXHIBIT NO.1.**

4 A. Schultz Settlement Exhibit No. 1 is a copy of the Agreement.

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### **5 Q. PLEASE DESCRIBE THE PROVISIONS OF THE AGREEMENT.**

6 Α. Exhibit C to the Agreement provides a "road map" of the positions of Duke Energy 7 Carolinas as filed in its Application and direct testimony and exhibits in this 8 proceeding, the positions of the Environmental Intervenors and the Public Staff as 9 represented in their direct testimony and exhibits, and the resulting resolution of the 10 issues between the Company and the Environmental Intervenors and the Public Staff. 11 The substantive provisions of the comprehensive Agreement reached by the Settling 12 Parties are contained in the Settlement Terms (Exhibit B to the Agreement). In 13 summary, the Agreement proposes to provide even greater benefits to consumers than

14 the Company's original filing by offering:

151. More energy savings - By increasing the energy efficiency targets within16a number of programs, the Company expects total energy savings to be more17than 50% higher than the original proposal.

182. Greater transparency – The Company will recover lost revenues separate19from the percentage of avoided cost payment.

203. Lower percentage of avoided cost – To address the Environmental21Intervenors' and the Public Staff's concerns about profitability as well as to22reflect the carve-out of net lost revenue recovery, the Company will be23compensated on the basis of a lower percentage of avoided cost for energy24efficiency and demand-side management programs. Under this modified25save-a-watt proposal, the Company's compensation will vary for demand-side26management and energy efficiency programs as follows:

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Demand-Side Management	Energy Efficiency % of
% of Avoided Costs	Net Present Value
j	("NPV") of Avoided Costs
75%	50%

4. <u>Performance targets and earnings caps</u> – Under the settlement, the Company is eligible to receive a higher level of incentive based on how well it performs. In addition, the Company's earnings opportunity is capped and is tied to the percentage of the target energy and capacity savings achieved. The performance targets and earnings caps are as follows:

% of Target Achievement	Earnings Cap (after taxes)
≥ 90%	15%
80% to 89%	12%
60% to 79%	9%
<60%	5%

5. <u>Greater stakeholder involvement</u> – The Agreement provides for the creation of a Regional Efficiency Advisory Committee to review the measurement and verification process, collaborate on new program ideas, and review changes to existing programs.

### 10 Q. HAVE ESSENTIAL ELEMENTS OF THE COMPANY'S ORIGINAL

11 PROPOSAL BEEN PRESERVED?

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12 Yes. The Agreement continues several core concepts embodied in the Company's Α. save-a-watt plan as filed in its original Application and direct testimonies and 13 exhibits. First, the Agreement preserves the important goal of providing an incentive 14 15 to the Company and its customers to be aggressive in developing new energy efficiency and demand-side management programs. The result is that the "saved 16 17 watts" from the Company's Energy Efficiency Plan will enable the Company to address a portion of its capacity and energy requirements while simultaneously 18 19 reducing environmental impacts and lowering customer bills. Second, the Agreement

Settlement Testimony: THEODORE E. SCHULTZ -4-Duke Energy Carolinas, LLC NCUC Docket No. E-7, Sub 831

continues the basic premise that the Company will only get paid for implementing 1 2 programs that produce actual energy and capacity savings, as measured and verified by an independent third party. Under the Settlement Agreement, Duke Energy 3 Carolinas continues to assume the risk of recovering its energy efficiency and 4 5 demand-side management program costs or any management incentive based upon its 6 performance. Finally, the Agreement reflects the concept that compensation for 7 successful implementation of energy efficiency programs will be predicated on a 8 discount to the "avoided costs" of a power plant to place energy efficiency and 9 demand-side management on a level playing field with supply-side resources. Under 10 the Settlement Agreement, Duke Energy Carolinas continues to assume the risk of 11 recovering its energy efficiency and demand-side management program costs or any 12 management incentive based upon its performance.

## 13 Q. MR. SCHULTZ, IN YOUR OPINION IS THE SETTLEMENT AGREEMENT 14 IN THE PUBLIC INTEREST?

15 Α. Yes. The Agreement provides increased energy savings for customers, reduces green 16 house gas emissions, and offers a fair earnings opportunity for shareholders for 17 investments in energy efficiency and demand-side management investments. Further, 18 the Agreement creates greater transparency to the Company's earnings opportunity by 19 making lost revenues a direct recovery component of the rider and true-up 20 calculations. Finally, there are performance targets tied to earnings caps that will 21 ensure the Company's profits are just and reasonable. Duke Energy Carolinas believes the Agreement is an important step forward in transforming North Carolina 22 23 to a more energy efficient economy.

Settlement Testimony: THEODORE E. SCHULTZ -5-Duke Energy Carolinas, LLC NCUC Docket No. E-7, Sub 831 2 Q. PLEASE EXPLAIN THE CALCULATION OF AVOIDED COSTS IN THE
3 SETTLEMENT AGREEMENT, AND COMPARE THAT CALCULATION TO
4 THE COMPANY'S INITIAL PROPOSAL.

**AVOIDED COST-BASED COMPENSATION FOR RESULTS** 

5 The basic calculations of avoided capacity and energy costs are the same as initially Α. 6 proposed. Avoided capacity costs will be based on Duke Energy Carolinas' filed avoided cost rate, as the Company initially proposed, with one modification. Instead 7 of updating the avoided costs with the bi-annual filed avoided cost rates, the avoided 8 9 capacity costs under the Agreement will remain fixed using the 2007 approved avoided costs in Docket No. E-100, Sub 106. The calculation of the avoided energy 10 costs will be the same as initially proposed by the Company. The avoided energy 11 costs will be based on the avoided energy costs per the Company's Integrated 12 Resource Plan, as described in the direct testimony of Company Witness Dr. Stevie. 13 The avoided cost rates will not be otherwise updated during the term of the 14 15 Agreement unless the filed biennial avoided capacity and energy cost rates change by 16 more than 25%.

17 Q. PLEASE DESCRIBE THE CHANGES MADE TO THE AVOIDED COST
 18 PERCENTAGES USED FOR THE REVENUE REQUIREMENTS AND THE
 19 ULTIMATE COMPENSATION TO THE UTILITY.

A. The Company initially proposed that revenue requirements reflect 90% of the avoided
 capacity and energy costs produced by both demand-side management and energy
 efficiency programs – as compensation for program costs, lost revenues, and a
 management incentive. Three primary changes were made in the Settlement
 Settlement Testimony: THEODORE E. SCHULTZ -6 Duke Energy Carolinas, LLC

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III.

1 Agreement to the avoided cost percentage originally proposed by the Company. 2 First, separate avoided cost percentages were developed for demand-side management and energy efficiency programs to ensure that the Company would be 3 indifferent to implementation of either kind of program relative to the portfolio's 4 overall profitability. Second, the recovery of lost revenues was carved out of the 5 6 avoided cost compensation and treated as a direct recovery cost. And third, the 7 percentages were lowered from 90% to 75% (avoided capacity costs) for demand-side management achievements, and to 50% (NPV of avoided lifetime capacity and 8 9 energy costs) for energy efficiency programs. These percentages were lowered to address the Environmental Intervenors' and the Public Staff's concerns about 10 profitability as well as to reflect the carve-out of net lost revenue recovery. 11

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### IV. <u>PERFORMANCE TARGETS AND EARNINGS CAPS</u>

# Q. PLEASE EXPLAIN THE SETTLEMENT AGREEMENT'S PERFORMANCE TARGETS AND EARNINGS CAPS, AND COMPARE THOSE TO THE COMPANY'S INITIAL PROPOSAL.

The initial proposal contained neither performance targets nor earnings caps, 16 Α. 17 reflecting the Company's belief that compensation for energy efficiency results, *i.e.* pay for performance, based on discounted avoided costs was a "win-win" proposition 18 19 for both customers and the utility, and that such a model would sufficiently provide 20 incentives to the utility to both control costs and achieve significant demand and 21 energy savings. The Agreement, however, contains both performance targets and 22 earnings caps, as additional assurances for customers. In addition, the Agreement reflects substantially increased efficiency results. The targeted savings achievement 23

Settlement Testimony: THEODORE E. SCHULTZ - -7-Duke Energy Carolinas, LLC NCUC Docket No. E-7, Sub 831 of \$754 million (nominal system dollars) from programs implemented during the four
 year term of the Agreement is based on the following targeted MW and cumulative
 MWh savings:

System Portfolio Impacts	•••••	L	[	···· 1	· · · · · · · · · · · · · · · · · · ·
Year	1	2	3	4	Beyond Year 4
MWh	234,132	490,634	672,548	1,439,742	6,833,078
MW	368	548	735	844	259
Note: Beyond Year 4 is just the EE impacts associated	d with Vintag	<del>es <u>1</u> - 4</del>	L		i

- 4 Based on these targeted portfolio savings, the Agreement contains tiered earnings
- 5 caps based upon varying levels of performance. Specifically:

% of Target	Earnings		
Achievement	Cap		
≥ 90%	15%		
80% to 89%	1 <b>2%</b>		
60% to 79%	9%		
<60%	5%		

- 6 Program costs will include marketing and advertising expenses, incentives paid to 7 customers, and the costs of impact evaluation studies. The return on program costs 8 will be simply a calculation of the percent return on investment on such portfolio 9 program costs on a nominal dollar basis after tax.
  - V. <u>REGIONAL EFFICIENCY ADVISORY COMMITTEE</u>

10 Q. PLEASE EXPLAIN THE SETTLEMENT AGREEMENT PROVISIONS

### 11 RELATING TO THE REGIONAL EFFICIENCY ADVISORY COMMITTEE.

A. As in our initial proposal, the Agreement recognizes that the successful development
 and implementation of energy efficiency programs requires constant monitoring and
 modification, and that an advisory group is helpful in that regard. Specifically, the
 Agreement specifies that a Regional Advisory Committee will be established for the

term of this Agreement. The role of the advisory group is to collaborate on new program ideas, review modifications to existing programs, ensure greater public understanding of the programs and funding, and review the measurement and verification process. The regional efficiency advisory group will meet at least twice each year and may establish working groups on specific topics. The Settling Parties envision that the advisory group will be comprised of a broad spectrum of regional stakeholders that represent balanced interests in the programs, as well as national energy efficiency advocates and experts. A third party will facilitate the advisory group's discussions.

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### VI. <u>CONCLUSION</u>

## Q. PLEASE SUMMARIZE WHY YOU BELIEVE THE SETTLEMENT AGREEMENT IS GOOD FOR CUSTOMERS AND SHOULD BE ACCEPTED BY THE COMMISSION.

The Agreement is good for customers for a number of reasons. First and foremost, 14 Α. 15 the Agreement sets an aggressive target for the Company to deliver \$754 million of avoided future generation costs. This is a dramatic increase in results from energy 16 efficiency and demand-side management programs for the Carolinas. 17 Energy efficiency and demand-side management programs (1) create avoided future 18 19 generation costs for all customers, (2) meet customer demand for electricity with a 20 zero-emission resource, and (3) lower usage and bills for customers who participate 21 in Duke Energy Carolinas' programs. These results reflect Duke Energy's core save-22 a-watt vision - a utility-sponsored approach to energy efficiency and demand-side 23 management that will stimulate investment and innovation in products and services,

Settlement Testimony: THEODORE E. SCHULTZ -9-Duke Energy Carolinas, LLC NCUC Docket No. E-7, Sub 831

on the one hand, and widespread customer participation on the other. The Settlement 1 2 Agreement maintains incentives for the Company to pursue energy efficiency and demand-side management comparable to the incentives utilities have to pursue 3 supply-side investments: a revenue stream based on discounted avoided supply-side 4 costs; and pay for performance, based on independently verified results. At the same 5 6 time, through negotiation and compromise, the Agreement contains a number of 7 customer protections, such as performance targets and earnings caps. For these reasons. I believe the Settlement Agreement is in the public interest and should be 8 9 accepted by the Commission as a fair and reasonable resolution of the issues in this proceeding. 10

### Q. IS THE COMPANY PRESENTING TESTIMONY OF OTHER WITNESSES IN SUPPORT OF THE SETTLEMENT?

A. Yes, Duke Energy Carolinas' Witnesses Farmer and Wiles also are presenting
 testimony in support of the settlement. Witness Farmer discusses changes to Rider
 EE (NC) necessitated by the settlement and Witness Wiles discusses the accounting
 and reporting implications of the settlement on the Company's original filing.

17 Q. DOES THIS COMPLETE YOUR SETTLEMENT TESTIMONY?

18 A. Yes, it does.

Settlement Testimony: THEODORE E. SCHULTZ -10-Duke Energy Carolinas, LLC NCUC Docket No. E-7, Sub 831

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1	Q.	Mr. Schultz, do you have a summary of your
2		settlement testimony?
3	А.	Yes, I do.
4	Q.	Would you please provide that at this time?
5		(THE SUMMARY OF THE PREFILED TESTIMONY OF THEODORE
6		SCHULTZ WILL BE COPIED INTO THE RECORD AS GIVEN
7		ORALLY FROM THE WITNESS STAND.)
L		

### DUKE ENERGY CAROLINAS, LLC Docket No. E-7, Sub 831 SUMMARY OF SETTLEMENT TESTIMONY OF THEODORE E. SCHULTZ

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1 The purpose of my testimony is to provide an overview of the Agreement and Joint Stipulation, dated June 12, 2009, entered into by and among Duke Energy Carolinas and 2 3 Southern Alliance for Clean Energy, Environmental Defense Fund, Natural Resources 4 Defense Council, and Southern Environmental Law Center, and the Public Staff. In my settlement testimony, I explain certain features of the modified "save-a-watt" incentive 5 6 model outlined in the Agreement and compare and contrast those features to our initial 7 proposal as presented in previously filed testimony in this docket. In addition, I state my 8 view as to why this Agreement is in the public interest.

In summary, the Agreement proposes to provide even greater benefits to consumers
than the Company's original filing by offering more energy savings, greater transparency,
performance targets and earnings caps, and greater stakeholder involvement.

12 Despite some differences from the Company's original proposal, the Agreement 13 continues several core concepts embodied in the Company's save-a-watt plan as filed in its 14 original Application and direct testimonies and exhibits. Specifically, the Agreement 15 preserves the important goal of providing an incentive to the Company and its customers to 16 be aggressive in developing new energy efficiency and demand-side management programs. 17 Second, the Agreement continues the basic premise that the Company will only get paid for implementing programs that produce actual energy and capacity savings, as measured and 18 verified by an independent third party. Finally, the Agreement reflects the concept that 19 compensation for successful implementation of energy efficiency programs will be 20

1 2 predicated on a discount to the "avoided costs" of a power plant to place energy efficiency and demand-side management on a more level playing field with supply-side resources.

3 In my opinion, the Settlement Agreement is in the Public Interest for a number of 4 reasons. First and foremost, the Agreement sets an aggressive target for the Company to 5 deliver \$754 million of avoided future generation costs, which represents an increase in 6 projected energy savings for customers over the Company's original filing. The Agreement 7 also creates greater transparency to the Company's earnings opportunity by making net lost 8 revenues a direct recovery component of the rider and true-up calculations. Finally, the 9 Agreement specifies certain earnings caps levels that are tied to the Company's performance 10 that will ensure the Company's profits are just and reasonable. For these reasons, I believe 11 the Settlement Agreement is in the public interest and should be accepted by the Commission 12 as a fair and reasonable resolution of the issues in this proceeding.

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This concludes the summary of my settlement testimony.

26 E-7, Sub 831 - Volume 1 1 MS. HEIGEL: Mr. Schultz is now available 2 for cross examination. Cross examination? 3 CHAIRMAN FINLEY: 4 MS. FENTRESS: No questions from the Public Staff. 5 6 MR. GREEN: Thank you, Mr. Chairman. 7 CROSS EXAMINATION BY MR. GREEN: 8 0. Good morning, Mr. Schultz. 9 Α. Good morning, Mr. Green. 10 On page 4 and 5 of your testimony beginning on line Ο. 11 19 you state, "The second -- the agreement -second, the Agreement continues the basic premise 12 13 that the Company will only get paid for 14 implementing programs that produce actual energy 15 and capacity savings as measured and verified by an 16 independent third party." Is that correct? That's correct. 17 Α. 18 ο. By that testimony are you saying that the 19 measurement and verification procedures are the 20 same under the original SAW proposal and the 21 Settlement Agreement? The process for the measurement and verification is 22 Α. 23 the same as the original proposal with I believe 24 one modification in the Settlement Agreement having

E-7, Sub 831 - Volume 1 1 to do with free ridership. 2 MR. GREEN: May I approach the witness? 3 CHAIRMAN FINLEY: Yes, sir. 4 Q. What I've handed you are pages 26, 27, and 28 of Dr. Stevie's initial testimony here. I would like 5 6 to ask you to read a few lines of that testimony. 7 First, if you'll read on pages 27 and 28 beginning on line 18 through line 5 of 28. 8 "The timing of the availability 9 Α. Page 27, line 18. 10 of participant and load impact results has 11 implications for the reconciliation and true-up 12 I expect that the first true-up process process. 13 the Company will have actual participant 14 information and possibly some load impact results, 15 most likely for demand response programs unless the 16 timing of the true-up filing is during or 17 immediately after the summer period. Load impact 18 results for all programs will not be available until completion of the second year of program 19 20 implementation. At that point, a true-up of load 21 impacts can be undertaken from the beginning of the 22 program through the second year." 23 And on through lines 4 and 5 also. I'm sorry. Q. 24 "In general, the Company anticipates that the Α.

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1		participant results would be reconciled each year
2		and load impact results every other year. However,
3		updates to the load impact results would only be
4		reconciled back to the previous impact evaluation,
5		not to the beginning of the program."
6	Q.	Based on Dr. Stevie's testimony and particularly
7		lines 4 and 5 on page 28, didn't the Company say in
8		the initial SAW proposal that participant results
9		would be reviewed and adjusted every year during
10		the programs?
11	А.	Yes.
12	Q.	And further, didn't the companies say that the load
13		impacts of the SAW programs, meaning the energy
14		efficiency savings, would be reviewed and adjusted
15		every year?
16	Q.	Yes. But I don't think I take that back. We
17		I think we provided a measurement and verification
18		schedule so any load impact studies that were done
19		would be factored into the evaluation of the
20		programs annually.
21	Q.	Okay. And would you also read Dr. Stevie's
22		testimony on page 26, lines 5 and 6?
23	Α.	Twenty-six, lines 5 and 6. "Duke Energy Carolinas
24		estimates that 5 percent of total program cost will

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E-7, Sub 831 - Volume 1 be required to adequately and efficiently perform 1 2 evaluations, monitoring, and verification." 3 ο. What percentage of the total program cost does Duke 4 estimate will be required to perform the evaluations, monitoring, and verification of the 5 programs under the Settlement Agreement? 6 7 Α. 5 percent. Q. 8 Would you look at page 18 of the Settlement 9 Agreement, which is Schultz Exhibit B? I'm there. 10 Α. 11 Q. All right. Would you read the last sentence of the 12 second paragraph under section two? 13 Α. "For purposes of this agreement, avoided cost 14 savings related to the energy efficiency programs 15 incorporate savings through the entire life of 16 measures installed during the four-year term of the 17 agreement. Avoided cost savings related to demand 18 side measures include only savings experienced 19 during the same term." 20 Q. The word term as used in the agreement means the 21 four-year term of the plan, is that correct? That's correct. 22 Α. 23 What that statement says is that energy efficiency Q. 24 programs -- for those programs energy efficiency

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savings that Duke will be paid for will include
 energy savings for the life of the programs for
 energy efficiency measure, not just for the four
 years of the pilot SAW program. Is that correct?
 A. That is correct.

Q. On the other hand, for demand side management
programs the incentives and so forth will be paid
only for the four-year term of the SAW program. Is
that correct?

10 Α. As part of the Settlement Agreement we split Yes. 11 out demand side management programs from energy 12 efficiency programs. The demand side management 13 programs we looked at as a one-year term so they 14 are paid just for a single year. The energy 15 efficiency program, you look at the benefits of those programs and present value goes back. 16 That's 17 how it's determined.

18 Q. So for the energy efficiency programs, if you have 19 a program life of say eight years, then the 20 incentives that the Company will receive will be 21 based on energy efficiency savings over the eight-22 year life of the program?

23 A. That's correct.

24 Q. But the only verification of those savings will be

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3TE-7, Sub 831 - Volume 1 1 at the four-year end of the term of the Settlement 2 Aareement. Is that correct? 3 The measurement and verification true-up Α. Correct. 4 process will be at the end of the four years. The 5 measurement and verification process takes place 6 all four years. 7 ο. And after those four years, for example, if there 8 is an eight-year program, then the savings that the 9 Company's incentives and payments are based on for 10 the following four years are what are called 11 presumed savings. Is that correct? 12 Α. They are based on the M and V studies and Correct. 13 best practices. Those would be the savings 14 projected for that for the next four years also. 15 Q. For example, if a consumer installs a compact 16 fluorescent light bulb or CFL under the save-a-watt 17 program, then Duke will receive compensation based 18 on energy savings for the life of the CFL, not just 19 for the four years of the pilot program. Is that 20 correct? 21 Α. That is correct. They receive benefit for the 22 useful life of that particular product, which is 23 five years. The useful life of a CFL is five years? 24 Q.

32 E-7, Sub 831 - Volume 1 That's what we have in our estimates is five years. 1 Α. 2 That's correct. What is the annual kilowatt hour savings of a CFL, 3 Q. 4 do you know? 5 I don't know off the top of my head. Dr. Stevie is Α. 6 here to -- and glad to go into great detail. 7 0. Just assume that it saves 20-kilowatt hours a year. I don't know whether that's accurate or not, but 8 9 just for our purposes if you would make that 10 assumption. Under the Settlement Agreement, if the monitoring and verification process confirmed that 11 12 the CFL installed by customer A would save 13 20-kilowatt hours per year, then Duke would receive 14 compensation for that CFL based on the total of 100 15 kilowatt hours saved. Is that accurate? 16 Present valued back to today. That's correct. Α. 17 Q. That's the 20-kilowatt hours saved plus the -- or times the five years of the program life? 18 19 Correct. Α. 20 Verification of that 20-kilowatt hours per year 0. 21 would occur when under the -- under the proposed 22 agreement? 23 Α. Again, they'd have to go back. Dr. Stevie in his 24 original testimony actually provided a schedule for

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1 every one the programs. So CFL's were laid out in 2 there, and I don't remember the exact schedule. 3 But I assume it would be the year after. CFLs 4 happen to be one that's very well measured and 5 verified and with pretty solid results. They don't 6 change a whole lot these days.

Q. What would happen if the energy savings were
presumed to continue for five years but the
customer replaced the CFL with an LED after three
years?

11 A. What would happen if the customer replaced the CFL12 with an LED after three years?

MS. HEIGEL: Mr. Chairman, I'm going to object to the line of questioning because this -the M and V protocols as filed by Dr. Stevie in his original testimony have not changed with the one exception that Mr. Schultz noted as part of the settlement. And if he would like to ask these questions, we would be more than happy to put Dr. Stevie back up to the extent that he wishes to make some points relative to those issues.

22CHAIRMAN FINLEY: Have you got the right23witness here, Mr. Green?

MR. GREEN: I mean, he testified that the

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E-7, Sub 831 - Volume 1 1 -- it continues the basic premise that the Company 2 will only get paid for implementing programs that 3 produce actual energy and capacity savings as measured and verified by an independent third 4 5 party. So that --CHAIRMAN FINLEY: All right. 6 I'11 7 overrule the objection. Mr. Schultz, answer as best you can. But you think you're getting into 8 something that is best answered by Mr. Stevie, you 9 let Mr. Green know that if you don't mind. 10 11 THE WITNESS: Okay. 12 0. (By Mr. Green) Let me restate the question. If the 13 customer who has participated in the CFL program 14 replaces the CFL bulb with an LED light after three 15 years, then wouldn't there be two years of presumed 16 savings that Duke would receive payment for that 17 don't actually occur? 18 Assuming the LED is more efficient than the Α. Yes. 19 CFL, then there would be greater efficiency than 20 what we're being paid for. Correct. 21 MR. GREEN: Those are all my questions, 22 Mr. Chairman. 23 CHAIRMAN FINLEY: All right. Mr. Runkle? 24 CROSS EXAMINATION BY MR. RUNKLE:

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35 E-7, Sub 831 - Volume 1 1 ο. Good morning, Mr. Schultz. 2 Α. Good morning. Looking at your -- the Exhibit B that's on page 18, 3 0. which is the -- I think it was numbered the first 4 5 time as part of the stipulation's settlement terms. Do you have that in front of you? 6 7 Α. I do. All right. Looking at paragraph three, which is 8 ο. 9 the program year in energy savings? 10 Is there a letter? A.3? Α. 11 Q. 3.A. is energy efficiency. 12 Α. Page 16? 13 Page 18. Q. 14 Page 18. Α. Yes. 15 ο. So we are looking at vintage one with energy 16 savings of .31 percent. Yes, .31 percent. 17 Α. 18 Okay. What is the first vintage year? 0. 19 The first -- first vintage year -- oh, let me -- as Α. 20 laid out in this Settlement Agreement, and I think 21 it's on the next page, if you go to page 19, the 22 second paragraph will say at the end of the second 23 paragraph, last line, "Vintage year one may be more 24 than 12 months as a result." So assuming there's

36 E-7, Sub 831 - Volume 1 1 an approval in 2009, vintage year one would be 2 what's remaining in 2009 through 2010. 3 0. Okay. And so the .31 percent energy savings is a 4 percentage of what, now? What was the -- what was 5 the base measure for that number? 2010. 6 Α. 7 It's 2010 what? Is it total sales of retail sales ο. 8 or --9 Total retail sales. Α. 10 Okay. So that's -- is that Duke's retail sales in Q. North Carolina? 11 It is a system number, so it's done on a system 12 Α. basis. The planning for its North Carolina system 13 14 plan is .31 percent of the system. 15 Q. And is that -- does Duke have that same arrangement 16 now in South Carolina? We have no arrangement right now in South Carolina. 17 Α. 18 So after the -- the four vintage years -- so 2010, 0. 19 11, 12, and 13 -- starting in 2014 what happens? 20 Α. I think as the settlement term agreement points 21 out, at the end of the four-year term, again, we'd 22 would have to go forward and provide a proceeding 23 for what happens after the four-year term is up. Assuming great results, I would expect something 24

37 E-7, Sub 831 - Volume 1 similar. 1 2 Now, I understand from reading some of the other Q. 3 testimony that you're looking at a 1 percent a year savings after 2014? 4 That's correct. 5 Α. And so I'm talking -- as somebody -- as a --6 **Q**. 7 representing a party that was not party to the 8 settlement discussions, I'm trying to determine 9 what Duke's commitment is here. Are -- is Duke 10 committed to the -- the first four vintage years of 11 .31 to .75 percent? 12 Α. Two different things. The long-term performance is 13 actually on page 21, which lays out the 1 percent 14 of 2009 sales per year. It's in item E. on 21. So 15 our -- our commitment is to go after all 16 cost-effective energy efficiency. This agreement 17 is for four years. Over those four years we are --18 have set targets to hit avoided cost of \$754 19 million, which are made up of energy efficiency 20 savings which were determined by the percentages 21 you see here plus demand side management savings to 22 total 754 million for the four years. 23 Is -- is that the -- you know, looking at -- based 0. 24 on your knowledge of energy efficiency programs and

38 E-7, Sub 831 - Volume 1 then Duke Energy's potential, are you going to meet 1 2 those target goals? 3 Α. Well, those target goals are aggressive. And our intent is, obviously, to meet those goals. 4 So it 5 will take -- it will require innovation and new It's been two years since we originally 6 programs. I have the utmost confidence in my team's 7 filed. 8 ability to understand customers and to deliver the 9 results. But it will take new programs. Let's be 10 clear. And so what is the minimum amount that Duke can do 11 ο. 12 under this Settlement Agreement? Is it zero a 13 year? I mean these are target goals, aren't they? 14 I mean, it's not -- they're not something that you're mandated to accomplish. They're -- they're 15 16 just target goals. 17 Α. Well, again, in the save-a-watt model we're paid on results. So if we want to lose a lot of money we 18 19 could get no results and go after energy 20 efficiency. So yeah, these are -- meet our 21 interest. Again, save-a-watt model is meant to put 22 energy efficiency on an equivalent playing field 23 with supply-side resources. We believe this 24 agreement does that, are we are committed to a

39 E-7, Sub 831 - Volume 1 fairly aggressive target to go after all 1 2 cost-effective energy efficiency. 3 ο. But if you spent no money on energy efficiency you don't get any penalties; you don't get any profit. 4 Is that correct? 5 If we spent no money on energy efficiency --6 Α. 7 You'd have no cost, you'd have nothing to recover, 0. you'd get no profits on it. 8 9 Ά. If we didn't -- if we didn't do anything on energy 10 efficiency, then several of us would have to leave 11 the Company, but there would be no cost. 12 Exactly. Q. 13 And then you'd be where you need to be. Α. 14 ο. So I'm trying to -- I'm trying to determine what 15 actually is -- has the Company committed to under 16 this stipulation agreement. You're going to try --17 you said we have this commitment. We're going to 18 try to reach these goals. If we meet the goals we 19 can recover our costs, we can get our incentives, 20 we can, you know, make some profit on this. You keep your job. But it's a commitment, is it not? 21 I'm trying to figure out how -- how -- you know, is 22 23 it -- this is a discretionary commitment. It's 24 something you're going to try to do, but you don't

40 E-7, Sub 831 - Volume 1 have to do it, do you, under this agreement? 1 2 Our intent in this agreement is to go after 754 Α. 3 million with everything we've got. So I think you heard Mr. Rogers in the initial discussion. 4 Ι 5 mean, this is -- our commitment is to go after it. This is a framework. You know, why wouldn't we go 6 7 after it? I mean, that's the whole intent of this agreement is to set up a framework that puts it on 8 9 an equal playing field with supply-side resources and to go after all cost-effective that we can get. 10 We believe this agreement does that. 11 12 And you feel it's aggressive, but do you feel it's 0. also something that Duke can accomplish in the 13 14 first four years? 15 Α. Yes. I mean, it will take some innovation. My 16 team has been working very hard, and we've got some 17 really, really great programs under development 18 that I think will -- will help us get there. Would the -- would the Company, then, since it --19 Q. 20 it seems to be a fairly strong commitment by the 21 Company to have this Commission mandate that in the first four years you will accomplish these goals? 22 23 Well, I think we have taken a different tack from Α. 24 the mandate approach to create something that

41 E-7, Sub 831 - Volume 1 really aligns all parties and their interests. 1 And 2 again, we've agreed with the environmentalist 3 groups, the Public Staff. The whole idea was to 4 get alignment so we're all working together. So, again, mandates typically set you at 5 a -- you know, are you going to hit a minimum 6 7 threshold. The whole intent here was to get all of our interests aligned, to work together and to do 8 9 things that we haven't done before. And we think 10 this accomplishes that. 11 0. Well, in your position as -- as vice president of 12 marketing and energy efficiency, would a -- would a 13 strong statement from the Commission help you meet 14 these goals or are you just -- you know, if the 15 Commission says you will do this will that help you accomplish that or is it just -- it just doesn't 16 17 mean anything to you? Well, obviously, any order from the Commission we 18 Α. 19 will do our best to comply with. But the fact is, 20 you have to get these numbers in the market. So we 21 have to produce programs that customers value and 22 they're willing to participate in. So whether a 23 mandate or an incentive or any structure, 24 ultimately the decision is made by customers

E-7, Sub 831 - Volume 1 purchasing and participating in the program. 1 2 that process is going to be the same. We are going after all of it. 3 ο. Now, inside the Company there would -- there are 4 5 other ways that the Company has cost and make 6 profits, are there not? I mean, building new power 7 plants, for one. Certainly, there's a lot of There could be potential profits in that in 8 costs. additional -- excuse me, profits in additional 9 sales of electricity to customers? 10 11 Α. Yes, there are other ways that -- that we make 12 money. And this agreement sets us on a playing 13 field to have the investments in energy efficiency 14 compete with those on the supply side. 15 0. Now, in your -- in your position as vice president

16 of marketing and the energy efficiency, what 17 happens if, you know, there is another project --18 you've got coal plants being considered, nuclear 19 power plants being considered. Do you make the --20 do you personally make the decision to go with this 21 energy efficiency programs or just -- who makes the 22 decisions on whether to go with an aggressive 23 energy efficiency program or, you know, building 24 new plants?

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43 E-7, Sub 831 - Volume 1 There's probably two things there. My -- my 1 Α. 2 directive is to get all the energy efficiency and 3 demand-side management resources that we can get that are cost effective. And that's an input into 4 5 our integrated resource plan. The integrated 6 resource plan determines which plants are needed 7 and get built and when. And part of that would be how much potential profit 8 Q. 9 the Company can make on those decisions. Is that 10 correct? Α. I am not part of the integrated resource plan. 11 My 12 -- again, my role in the plan is very simple. Ι 13 input the energy efficiency and demand-side 14 resources to be considered in that plan and what 15 they cost to do. Okay. Do you have in front of you Mr. Wilson's 16 Ο. 17 testimony, particularly his Exhibit No. 2, which is a chart, Cumulative Energy Savings Impact of Energy 18 19 Efficiency Programs Assuming Targets and Agreements 20 Are Achieved and Maintained? 21 Can you give me the page number, please? Α. It's Exhibit 2. It's after his resume at the end 22 Q. 23 of his testimony. 24 Α. Yes, I do.

E-7, Sub 831 - Volume 1 1 ο. And if you'd just look at that and --2 MR. RUNKLE: Mr. Chairman, may I approach the witness? 3 CHAIRMAN FINLEY: Yes, sir. 4 5 MR. RUNKLE: And rather than for all of us to dig this out, it's NC WARN Rogers Cross 6 7 Exhibit 1. 8 0. This exhibit was admitted into evidence. It's NC 9 WARN Rogers Cross Exhibit 1, which started with Ms. 10 Hager's Supplemental Exhibit No. 2 which shows the energy it -- efficiency impacts, the bottom line is 11 12 the save-a-watt is filed. The next line with the -13 - the little rectangles is the save-a-watt that's 14 in the IRP. 15 And then the -- the line with the squares 16 going up to the right is the -- what Mr. Rogers characterized as a commitment to the National 17 18 Energy Efficiency Association. Were you here for 19 his testimony or are you familiar with this 20 exhibit? I wouldn't say I'm familiar with it, but I remember 21 Α. this exhibit. I haven't studied it or anything. 22 23 0. And then the -- the one on the left is an exhibit I 24 actually had, was -- was Dr. Blackburn's

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45 E-7, Sub 831 - Volume 1 recommendation of a 10 percent goal over ten years 1 starting in 2008, which -- we're now looking at a 2 3 vintage year of 2010. And that's why I wanted to -- to also have you look at Mr. Wilson's Exhibit No. 4 5 2, which is actually a middle line in here between Dr. Blackburn's recommendation and the national 6 7 commitment, is it not? Α. Let's see. I haven't plotted that line, but it 8 9 looks like it would -- let's see --10 0. Looking at a 2010 --Α. (Witness performs calculations.) It looks like it 11 12 would be between those two. With a four-year ramp up. I think that would be a 13 0. 14 way to characterize those first four vintage years, 15 and then with a goal of 1 percent a year after that. Is that correct? 16 17 Α. Correct. 0. So in looking at Mr. Rogers' testimony of last year 18 19 with a national commitment, basically what Duke has 20 done is just move that national commitment up a 21 couple of years, is it not? 22 Α. No. The national commitment hasn't changed at all. 23 It's still starting in 2015 and 1 percent a year. Starting in -- 1 percent of 2009 sales starting in 24

46 E-7, Sub 831 - Volume 1 2015 and every year thereafter. 1 2 Q. And is that part of -- is that same national 3 commitment part of Duke's target goals under the 4 Settlement Agreement? The Settlement Agreement targets are a ramp-up 5 Α. 6 towards achieving that 1 percent per year. 7 Ο. So again, after the first four-year ramp-up Okay. is Duke still committed to the 1 percent a year 8 9 savings? 10 Again, the 1 percent a year savings are subject to Α. 11 approval of save-a-watt. So assuming that 12 save-a-watt was in place, that commitment would 13 still -- would stand. Okay. And again, as we talked about the -- after 14 Ο. 15 the four-year ramp-up, how strong of a commitment 16 is that from Duke? Is this something that Duke is 17 going to do or is it just looking out, you know, 18 over the next decade and saying that's our goal? 19 Duke is clearly committed long term. Q. No. I think 20 in, you know, something as -- you know, it's an 21 innovative new approach to go after energy 22 efficiency. And all the parties agreed that after 23 four years let's look at it. What did we learn? 24 What should we be doing going forward? If we're

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1		very successful and it's working very well, then I
2		would expect something like that going forward.
3		But it didn't limit our commitment to energy
4		efficiency in any way, shape, or form. It was for
5		all of us to learn together and to come back and
6		say what should we do following the four years.
7		It's one of those things that what if we're
8		right?
9	Q.	So the the so let me get this straight now
10		since again, my client wasn't part of these
11		discussions. Duke has a fairly firm commitment
12		over the first four years of the ramp-up. You say
13		that the goals are ambitious, but it's something
14		that you feel strongly that Duke can accomplish.
15		Would that be a fair characterization?
16	Α.	Yes.
17	Q.	And then after the after the four years you will
18		come back to the Commission and say we think at
19		that time we need to reassess, but looking at
20		August 2009 we think we can do 1 percent a year.
21		And I mean, is that where you are right now?
22	А.	We are designing our programs to go after all
23		cost-effective energy efficiency and striving
24		towards the commitments that are here in this
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48 E-7, Sub 831 - Volume 1 four-year plan and our national commitment assuming 1 we still have the save-a-watt mechanism in place at 2 3 1 percent a year. I have some questions about net lost revenues. 4 Q. 5 Would Mr. Farmer probably be better to ask about those kind of specifics in part of the program? 6 7 Α. I believe Dr. Stevie depending on whether it's an 8 accounting issue or a conceptual issue. He filed -9 - he supported the -- the responses that we filed 10 on net lost revenues. 11 0. I think it was in Mr. Farmer's testimony. Let me 12 ask Mr. Farmer when he -- when he comes up. We'll 13 see if we can do it from there so --14 MR. RUNKLE: I have no further questions 15 for the witness, Your Honor. 16 CHAIRMAN FINLEY: Further guestions of interveners? 17 18 MR. HOLTZMAN: No, sir. 19 MS. THOMPSON: No, thank you, Mr. 20 Chairman. No questions. 21 MR. OLSON: We have no questions. 22 MR. MCDONALD: No questions. 23 MR. PAGE: Would I be allowed to ask the witness just about three or four guestions? 24

E-7, Sub 831 - Volume 1 1 CHAIRMAN FINLEY: Always, Mr. Page. 2 CROSS EXAMINATION BY MR. PAGE: 3 MR. PAGE: Let me first of all identify 4 myself for the record. I apologize for being late, 5 but I had it on my calendar for 9:30. I am Bob 6 Page of the Raleigh law firm Crisp, Page & Currin. 7 I represent Carolina Utility Customer Association. 8 ο. Good morning, Mr. Schultz. How are you doing? 9 How are you? Α. Good. 10 Q. I know it's a little early for lunch, but I want to 11 ask you to go along with me to the cafeteria line. 12 Can we do that just for a couple of minutes this 13 morning? 14 Α. Sure. 15 ο. You will recall that one of the positions of my 16 client, that is a group of large industrial 17 customers, some of Duke's largest users, has taken 18 is that the save-a-watt proposal originally, and as 19 we understand it in the supplement, is an all-or-20 nothing proposition for industrial users. That is, 21 if they come into it, they pay for every one of the 22 programs; if they stay out of it, they pay for 23 nothing. Is that a correct statement? 24 Α. That's correct.

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50E-7, Sub 831 - Volume 1 Does Duke have any plans to offer 1 ο. All right. 2 energy efficiency and demand-side management 3 programs to industrial customers where they can select only those and pay for only those that would 4 benefit them and not pay for the other parts of the 5 6 program? 7 Α. We do not have a cafeteria style where you select individual programs. 8 9 All right. Is that one of the issues that, ο. 10 depending on the results of the pilot program, Duke 11 would be willing to revisit? 12 Α. I think the place to look for what could work would 13 be what we did in Indiana with the industrial 14 I think that the difficulty here is customers. 15 Senate Bill 3 is pretty clear on the rules and the 16 opt-out. In Indiana we did separate demand-side management from energy efficiency working directly 17 18 with the industrial customers. 19 Q. All right. You can certainly understand the reluctance of an industrial customer who is already 20 21 implementing three or four of the programs that 22 Duke is offering to sign up for one program that 23 might benefit that customer and end up paying for 24 all of them.

51 E-7, Sub 831 - Volume 1 Α. 1 Yes. 2 MR. PAGE: Thank you. That's all I have. CHAIRMAN FINLEY: 3 Redirect? 4 MS. HEIGEL: Yes. 5 REDIRECT EXAMINATION BY MS. HEIGEL: 6 Q. Mr. Schultz, could you explain to the Commission 7 why you believe it's appropriate to capture the net present value of energy efficiency savings in the 8 9 year in which the Company makes it spent on those programs? 10 11 Α. Yeah, they -- we spend the money up front on energy 12 efficiency. All the costs are actually incurred in 13 the first year. There's a stream of benefits, and 14 it's appropriate from our point of view to bring 15 those benefits back to present value and 16 essentially in that vintage year, in the year in 17 which the program was installed. What it does is 18 at the end of the four years, since it's a 19 four-year agreement, you have the fifth year of 20 true-up that you go through. But you're --21 essentially, you've closed the books at the end of 22 that fifth year on the four-year -- all the 23 programs. So it keeps it very clean and very 24 simple.

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1	Q.	But energy efficiency creates future benefits; and
2		depending on the measure involved, it may be a
3		varying number of years. Isn't that your
4		testimony?
5	А.	Yes. Energy efficiency creates benefits for five
6		to 15 years. And quite frankly, it's unlikely that
7		the replacement would ever go backwards. So I
8		think it's more a perpetuity investment for which
9		we take a useful life of five or 15 years depending
10		on the measure.
11	Q.	Now, demand-side management programs, on the other
12		hand, do those create future benefits?
13	А.	No. Demand-side management programs are a benefit
14		for the year in which they incur. So, in other
15		words, they're equivalent to a peaking station. So
16		every year you can look at those and they're either
17		there or they're not. And if they're there, they
18		have benefit for the year that they're there.
19	Q.	So the oh, I'm sorry. Go ahead.
20	А.	So the so there's no continuing automatic
21		benefit like energy efficiency programs, which have
22		a useful life. Now, we may keep that for ten
23		years, but every year it's a decision whether you
24		have it or not.

E-7, Sub 831 - Volume 1 1 ο. All right. So the right to interrupt -- the 2 Company's right to interrupt is year by year? That's correct. 3 Α. You stated in response to Mr. Green's questioning 4 0. 5 that the measurement verification process was an 6 ongoing process. Can you elaborate a little bit 7 more on that? 8 Α. Yes. There was actually a schedule in Dr. Stevie's 9 original testimony that laid out each of the 10 So we -- we come into this with programs. 11 measurement verification on some measures that we 12 have in other states. We use experts from outside, 13 and then we continue that process. So we will put 14 different programs in. It'll be measured 15 throughout the course of those four years. Every 16 time we do a measurement and verification in a 17 given year, we go back and look at the programs and 18 update them for cost effectiveness and what they 19 look like going forward. So we never get way out 20 of balance, so to speak. 21 Q. Okay. And do you recall -- does the Company's 22 measurement and verification process measure 23 persistence? 24 Α. Yes, it does.

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54 E-7, Sub 831 - Volume 1 1 Q. So under Mr. Green's example of a CFL been switched 2 out after three years, would that be captured in 3 the Company's M and V result? Α. Yes, it would. Persistence is does that measure 4 5 stay in place. 6 0. Mr. Runkle had asked you a question in regards to 7 the system benefits of the Company's proposal. Has the Company made a new proposal in South Carolina 8 9 similar to the settlement here in North Carolina? 10 Α. Yes, we have made a similar proposal to what's the 11 settlement here in North Carolina. 12 ο. You also had a number of exchanges with Mr. Runkle 13 about our targets and the Company's commitment to those targets. Does the Company bear risk if it 14 15 doesn't meet its targets? 16 Α. Yes. The Company still is paid on results, so we 17 bear the risk if those targets are not achieved. 18 And again, this is the model that, you know, if we 19 don't hit the -- the targets, don't do it in a 20 cost-effective manner, program cost, then we end up 21 losing money. 22 Q. And has Duke begun to implement any energy 23 efficiency programs? 24 Α. We started on June 1. Yes, we have.

55 E-7, Sub 831 - Volume 1 1 0. And so I would assume from that that the Company 2 has begun to spend money? 3 Α. Yes, we have. 4 Q. Are the Company's results dependent upon Company or 5 customer acceptance of the Company's programs? Α. 6 I think I tried to make that pretty clear. Yes. 7 If customers don't participate in the programs, 8 then there are no results. 9 Q. So as it relates to the Company's commitment that's 10 set forth in the Settlement Agreement, a 11 substantial portion of the Company's ability or all of the Company's ability to meet their targets is 12 13 really customer dependent? 14 Α. Yes. 15 Q. In terms of whether you have a mandate or a 16 commitment to meet these results, does the Company rely upon -- has the Company relied upon or will 17 18 the Company rely upon results that we have targeted 19 for purposes of its integrated resource planning 20 process? 21 Α. Could you repeat that please? 22 0. Are these targets reflected in the Company's 23 integrated resource planning process? 24 Α. The integrated resource planning process will Yes.

56 E-7, Sub 831 - Volume 1 1 have a base and then it will have a sensitivity. And in that sensitivity would be this aggressive 2 case that is in this settlement. 3 4 ο. So in your estimation, what would the repercussions 5 be if the Company were not to aggressively pursue the targets set forth in the Settlement Agreement? 6 7 Α. Well, if we did not go after those aggressive 8 targets that are in the Settlement Agreement, then 9 it would have implications on our resource plan 10 overall and what resources are required and would put us in a -- in a spot, you know. It's tough to 11 12 build a plant in that kind of a time frame, so 13 you'd end up in the short term, you know, looking at some alternative regarding purchase power. 14 15 And in terms of the Company's decision as to 0. 16 whether to pursue energy efficiency versus a plant 17 resource, is that also factored or determined by the IRP process? 18 19 Α. The IRP process determines which of the resources, 20 the cost-effectiveness of those resources are all 21 put into the -- the mix, and the IRP determines 22 which resources you should be pursuing. 23 And is that process based on the principles of 0. 24 least cost planning?

57 E-7, Sub 831 - Volume 1 1 Α. It is. 2 MS. HEIGEL: I have nothing further. 3 CHAIRMAN FINLEY: Questions by the Commission? Mr. Culpepper? 4 5 COMMISSIONER CULPEPPER: Would you flip over to page 20 of your Schultz Settlement Exhibit 6 7 No. 1, which I also understand is the Settlement Agreement? The numbers of the pages are the same, 8 9 I think. Page 20. 10 THE WITNESS: Yes. I'm there. COMMISSIONER CULPEPPER: You're there? 11 12 Do you see number six there, getting there kind of 13 down to the bottom where you've got a chart there 14 that says System Portfolio Impacts? 15 THE WITNESS: Yes. 16 COMMISSIONER CULPEPPER: I want to talk 17 with you a little bit about that. I just want to 18 look at year one. You've got megawatt hours. I'm 19 assuming this is not confidential since it's 20 sitting right here in the open. 21 THE WITNESS: Correct. 22 COMMISSIONER CULPEPPER: That figure 23 there, that 234,132, I'm assuming that includes 24 both residential and nonresidential. Is that

58 E-7, Sub 831 - Volume 1 1 correct? 2 THE WITNESS: That is correct. COMMISSIONER CULPEPPER: All right. 3 Can you tell me how much of that is residential? 4 5 THE WITNESS: I can't off the top of my head. 6 7 COMMISSIONER CULPEPPER: Is it engulfed in some work papers and it's not -- it's not laid 8 9 out? I can't find it laid out in any piece of paper that we've -- we've seen here as an exhibit 10 11 in the case. Do you know of anywhere where it 12 might be? 13 THE WITNESS: If not, we can definitely 14 get it. But I don't know. 15 COMMISSIONER CULPEPPER: You got any 16 idea? I'm not going to hold it to you. You got 17 any idea about approximately how much of that would 18 be residential and nonresidential? And if you 19 don't, say so. 20 THE WITNESS: If I recall, it's at a --21 boy. The res/nonres? I'm honestly not sure. 22 COMMISSIONER CULPEPPER: Well, that's the 23 I think it's about a 60-40 24 THE WITNESS:

59 E-7, Sub 831 - Volume 1 1 slip. 2 COMMISSIONER CULPEPPER: -- that's the answer sometimes. You don't know the answer. 3 THE WITNESS: I'm not sure -- the split. 4 COMMISSIONER CULPEPPER: Okav. 5 Well, is 6 all of that same true for the megawatt figure there in 368? That's residential and nonresidential? 7 THE WITNESS: That's correct. 8 9 COMMISSIONER CULPEPPER: Okay. And I 10 take it you don't know the breakdown on that 11 either, do you? 12 THE WITNESS: No. 13 COMMISSIONER CULPEPPER: All right. Okay, let me ask you this. The megawatts that are 14 15 avoided per this -- this chart here, it ramps up to 16 844 megawatts in year four. Is that correct? 17 THE WITNESS: That's correct. 18 COMMISSIONER CULPEPPER: All right. 19 Would that be year 2013? 20 THE WITNESS: Yes, assuming we -assuming vintage year one is --21 22 COMMISSIONER CULPEPPER: If everything 23 goes the way everybody wants it to go other than 24 some of the parties in this case. If everything

60 E-7, Sub 831 - Volume 1 goes the way the parties to the Settlement 1 2 Agreement want it to go, would that year be 2013? 3 THE WITNESS: Yes. COMMISSIONER CULPEPPER: So in year 2013, 4 5 if everything goes right, the Company would be able to avoid in -- in 2013 844 megawatts of generation? 6 7 THE WITNESS: That's correct. 8 COMMISSIONER CULPEPPER: Okay. Why does 9 the figure reduce -- it goes down by about 600 10 megawatts when you get beyond year four? THE WITNESS: Beyond year four is just 11 12 the energy efficiency programs, their capacity 13 So beyond year four -- there's two component. 14 components that are embedded in the 844. There's 15 peaking, which is 585 of those megawatts -- so 16 they're offsetting peaking plants. The two -about 260 megawatts of that is really base load 17 coming from energy efficiency programs. 18 So that -that's the -- the megawatts that are beyond 2013. 19 20 The peaking assets would still be there and 21 callable. 22 COMMISSIONER CULPEPPER: I'm just trying 23 to figure why the peaking assets go away in this 24 chart here. I mean --

E-7, Sub 831 - Volume 1 THE WITNESS: I don't think they -- they 1 2 go away. We're just trying to show what was beyond 3 year four that would carry over. They really --4 we're just trying to show the benefits of the 5 megawatt hours and the megawatts that are beyond 6 year four from the programs that were completed in 7 those four years. COMMISSIONER CULPEPPER: 8 But do I 9 understand you to say that although they're not reflected in this chart here, the peaking assets 10 would still be there? 11 12 THE WITNESS: Yes. 13 COMMISSIONER CULPEPPER: So the company 14 would be able to avoid 844 megawatts in year 2014? 15 THE WITNESS: Yes. 16 COMMISSIONER CULPEPPER: Thank you. 17 CHAIRMAN FINLEY: Mr. Schultz, would you 18 look at the top of page 4? 19 THE WITNESS: Yes. 20 CHAIRMAN FINLEY: I want to ask you about 21 the percentages at which you are -- the avoided 22 cost percentages at which you are compensated under 23 the model. You've got up at the top there in the 24 chart 75 percent of avoided costs for demand-side

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62 E-7, Sub 831 - Volume 1 1 management and 50 percent energy efficiency 2 percentage net present value. Right? THE WITNESS: That's correct. 3 COMMISSIONER CULPEPPER: 4 And in the Commission's order of February 26, 2009 approving 5 programs, it asked the Company to address a number 6 7 of scenarios with different percentages. Do you recall that? 8 9 THE WITNESS: Yes. CHAIRMAN FINLEY: And some of the 10 11 scenarios that the Commission modeled its questions 12 on had to do with a settlement that had been 13 entered into in Indiana at that time. Remember 14 that? 15 THE WITNESS: Yes. CHAIRMAN FINLEY: And in the Indiana 16 17 proposal, the percentages were higher for demand-18 side management than for energy efficiency as in 19 the case here, right? 20 THE WITNESS: That's correct. CHAIRMAN FINLEY: And in the scenarios 21 22 that the Commission asked the Company to consider 23 it reversed that so that the energy efficiency was higher and the demand-side management was lower on 24

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1		the theory that the way the Commission interpreted
2		Senate Bill 3 was that we felt the legislature
3		deemed energy efficiency to be of higher value than
4		demand-side management. Was our interpretation of
5	:	the priorities of Senate Bill 3 consistent with
6		Duke's? In other words, do you believe that Senate
7		that the Senate Bill 3, the expression of the
8		legislative intent, places a greater premium on
9		energy efficiency than demand-side management?
10		THE WITNESS: I can't speak to the intent
11		of Senate Bill 3 and which one was more important
12		between demand-side management and energy
13		efficiency. Our intent here was to put them on a
14		level playing field so that they're as part of
15		the Settlement Agreement, they both earn a similar
16		return.
17		CHAIRMAN FINLEY: Could you expand upon
18		that a little bit, since one is 75 percent and one
19		is 50 percent how they're on a level playing field?
20	Α.	Yes. One one is a one-year useful life or net
21		present value in the current year. So if you look
22		at the 75 percent applied to the portfolio for
23		demand-side management resources, you're going to
24		get a return per the Settlement Agreement

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64 E-7, Sub 831 - Volume 1 1 they're set at about the maximum -- the maximum cap 2 of 15 percent after tax for program cost. 3 The same thing is applied, even though optically it looks lower at the 50 percent. You've 4 5 got to remember it's the present value of all those benefits coming back and lost margins are separated 6 7 So lost margins occur with energy efficiency out. They're treated separately, which would 8 programs. 9 lower the avoided cost percentage. And then that 50 percent again will return about a 15 percent 10 11 after tax return on the program cost. CHAIRMAN FINLEY: So over time the 12 13 avoided cost, 75 percent for demand-side management 14 and 50 percent for energy efficiency are supposed 15 to be comparable or equivalent? 16 THE WITNESS: That's correct. 17 CHAIRMAN FINLEY: That's all I have. 18 Thanks. Any questions on the Commission's 19 questions? 20 MS. HEIGEL: Duke has none. 21 CHAIRMAN FINLEY: Very well. Thank you, 22 Mr. Schultz. 23 Thank you. THE WITNESS: 24 (WITNESS EXCUSED)

65 E-7, Sub 831 - Volume 1 1 MS. NICHOLS: We now call Danny Wiles. 2 (WHEREUPON, J. DANNY WILES WAS CALLED AS A WITNESS, 3 DULY SWORN, AND TESTIFIED AS FOLLOWS:) DIRECT EXAMINATION BY MS. NICHOLS: 4 5 ο. Mr. Wiles, please state your full name and business address for the record? 6 7 Α. My name is James Danny Wiles, and my business 8 address is 526 South Church Street, Charlotte, 9 North Carolina. 10 And by whom are you employed and in what capacity? Q. 11 Α. I am employed by Duke Energy Business Services, LLC 12 as vice president, franchise electric and gas 13 accounting. I am an officer of Duke Energy 14 Carolinas, LLC. 15 Have you previously presented testimony in this 0. 16 docket? 17 Α. Yes. 18 Q. And did you cause to be prefiled in this docket 19 settlement supporting testimony consisting of six 20 pages? 21 I did. Α. 22 ο. Do you have any changes or corrections to your 23 settlement testimony? 24 Α. I do not.

66 E-7, Sub 831 - Volume 1 MS. NICHOLS: Mr. Chairman, I would move 1 that the settlement testimony of Mr. Wiles be 2 3 reproduced into the record as if given orally from the stand. 4 CHAIRMAN FINLEY: Mr. Wiles' direct 5 6 prefiled testimony will be copied into the record as though given orally from the stand. 7 MS. NICHOLS: Oh. And we would also at 8 9 this point move Mr. Schultz's Exhibit 1 into the 10 record. CHAIRMAN FINLEY: Without objection, 11 12 Schultz Exhibit 1 is entered into the record. 13 (THE PREFILED SETTLEMENT TESTIMONY OF J. DANNY 14 WILES WILL BE COPIED INTO THE RECORD AS IF GIVEN 15 ORALLY FROM THE WITNESS STAND AND SCHULTZ 16 SETTLEMENT EXHIBIT 1 IS ADMITTED INTO EVIDENCE.)

1		I. <u>INTRODUCTION AND PURPOSE</u>
2	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
3	А.	My name is J. Danny Wiles and my business address is 526 South Church Street,
4		Charlotte, North Carolina.
5	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
6	А.	I am employed by Duke Energy Business Services LLC as Vice President,
7		Franchised Electric & Gas Accounting. I am an officer of Duke Energy
8		Carolinas, LLC ("Duke Energy Carolinas" or the "Company").
9	Q.	DID YOU PREVIOUSLY CAUSE TO BE PRE-FILED IN THIS DOCKET
10		CERTAIN DIRECT AND REBUTTAL TESTIMONIES ON BEHALF OF
11		DUKE ENERGY CAROLINAS?
12	А.	Yes, I did.
13	Q.	WHAT IS THE PURPOSE OF YOUR SETTLEMENT TESTIMONY IN
14		THIS PROCEEDING?
15	A.	The purpose of my testimony is to describe changes to the accounting and
16		reporting treatment requested by the Company in my direct testimony as a result
17		of the Agreement and Joint Stipulation of Settlement (the "Agreement") entered
18		into between Duke Energy Carolinas, LLC ("Duke Energy Carolinas" or the
19		"Company") and the Southern Alliance for Clean Energy, Environmental Defense
20		Fund, Natural Resources Defense Council, and the Southern Environmental Law
21		Center (collectively, the "Environmental Intervenors").

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## Q. MR. WILES, WHAT HAS BEEN THE FOCUS OF YOUR TESTIMONIES IN THIS PROCEEDING?

A. My testimonies in this proceeding have focused on the proposed deferral of
program costs and amortization of such costs over the life of the applicable
program and the proposal to treat the earnings stream produced under the "save-awatt" Energy Efficiency Plan similarly to that which would have been produced
by a generating plant investment for reporting purposes.

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#### II. <u>REPORTING AND ACCOUNTING ISSUES</u>

9 AS A RESULT OF THE AGREEMENT REACHED WITH THE 0. 10 ENVIRONMENTAL INTERVENORS AND THE COMMISSION'S ORDER, DATED FEBRUARY 26, 2009, PLEASE EXPLAIN HOW THE 11 12 COMBINED RECOVERY OF PROGRAM COSTS AND THE **MANAGEMENT INCENTIVE WILL BE HANDLED IN FUTURE ES-1** 13 **REPORTS.** 14

15 A. In accordance with the Commission's Order Resolving Certain Issues, Requesting
16 Information on Unsettled Matters, and Allowing Proposed Rider to Become
17 Effective Subject to Refund, dated February 26, 2009, the Company will (1)
18 include actual program revenues<sup>1</sup> and actual program costs for purposes of
19 calculating and reporting its regulated earnings to the Commission in its quarterly

<sup>&</sup>lt;sup>1</sup> The management incentive (or, level of profit) that the Company ultimately will realize under the Agreement is not fixed or known in advance, but rather, is dependent on a number of variables and factors. The Company will be compensated based solely on its ability to achieve verified avoided cost savings on behalf of customers. The maximum rate of return on program costs that may be earned (*i.e.*, earnings cap) declines as the Company's achievement of avoided cost savings relative to target declines. Although the level of revenues collected by the Company can be reported on a quarterly basis, the determination of the level of management incentive that may be retained by the Company will not be known for certain until the measurement and evaluation study is completed, which will not occur until after the four-year settlement term has ended.

ES-1 reports; (2) provide supplementary schedules setting forth the Company's 1 jurisdictional earnings excluding the effects of its energy efficiency and demand-2 side management programs; and (3) provide schedules separately stating the costs 3 associated with each program or activity, and actual revenues received from the 4 demand-side and energy efficiency programs. Duke Energy Carolinas will also 5 provide detailed calculations supporting the foregoing, including schedules or 6 calculations that show (a) actual revenues (as qualified by footnote 1 above), (b) 7 expenses, (c) taxes, (d) operating income, (e) rate base, including components, 8 and (f) applicable capitalization ratios and cost rates, including overall rate of 9 return and return on common equity. Order at 60 (Feb. 26, 2009). 10

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Q. PLEASE EXPLAIN ANY PERTINENT FINANCIAL ACCOUNTING
 ISSUES THAT RELATE TO THE ENERGY EFFICIENCY PLAN.

13 Accounting rules and regulations require that the Company monitor, on an Α. 14 ongoing basis, the difference between financial results applicable to the save-awatt programs that are expected ultimately to be realized based on the terms of the 15 Agreement and the financial results recorded on the Company's books that result 16 from the recovery of costs via Rider EE (NC). The Company will record a 17 regulatory asset on its books, subject to the guidelines included in promulgated 18 19 accounting literature, if it appears that the level of revenues that will ultimately be 20 recoverable based on the terms and provisions of the Agreement, are greater than 21 the level of revenues billed via Rider EE (NC). On the other hand, the Company 22 will record a regulatory liability if the level of revenues billed customers is in excess of the level of revenues that is estimated to be ultimately recoverable. 23

Settlement Testimony: J. DANNY WILES Duke Energy Carolinas, LLC NCUC Docket No. E-7, Sub 831

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### Q. DOES THIS ACCOUNTING TREATMENT FOLLOW GENERALLY ACCEPTED ACCOUNTING PRINCIPLES ("GAAP")?

3 Yes. Guidance on this issue can be found in various accounting pronouncements, Α. most notably, Emerging Issues Task Force ("EITF") Issue No. 92-7 (Accounting 4 by Rate-Regulated Utilities for the Effects of Certain Alternative Revenue 5 Programs). Practically speaking, there is little need to address the accounting for 6 7 situations in which the Company owes customers. In those situations, the Company will record a reduction to revenues in recognition of the fact that the 8 9 Company has an obligation to return the over-collected amounts to customers. EITF 92-7 addresses the issue of accounting for amounts owed the utility (as 10 11 opposed to amounts owed customers) under alternative rate recovery plans 12 including demand-side management and similar energy efficiency plans. 13 Basically, the EITF reached consensus that once specific events have occurred 14 that provide for future customer billings, then, the utility can recognize the 15 additional revenues if the following conditions are met:

161.The program is established by an order from the utility's regulatory17commission that allows for the automatic adjustment of future18rates.Verification of the adjustment to future rates by the19regulatory commission would not preclude the adjustment from20being considered automatic.

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2. The amount of additional revenues for the period is objectively
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determinable and is probable of recovery.

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3. The additional revenues will be collected within 24 months

1following the end of the annual period in which they are2recognized.

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# 3 Q. WILL THE COMPANY REQUIRE ANY COMMISSION ASSURANCES 4 OR ACTIONS IN ORDER TO IMPLEMENT THE ACCOUNTING 5 GUIDELINES PRESENTED ABOVE?

A. Arguably, the terms of the Agreement meet the requirement of EITF 92-7.
However, a Commission order approving the Agreement should acknowledge
clearly that future rates may be adjusted in accordance with the provisions set out
in paragraph one of my prior answer.

## 10 Q. WILL THE COMPANY'S REQUEST THAT IT BE AUTHORIZED TO 11 DEFER PROGRAM COSTS STILL BE NEEDED?

A. No. The 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. However,
because of Commission rule R8-27(a)(2), Duke Energy Carolinas does request
that the Commission include in its order in this proceeding an ordering paragraph
for regulatory accounting purposes authorizing the Company to use a regulatory
asset and a regulatory liability account for the purposes mentioned above.

## 19 Q. DOES THIS CONCLUDE YOUR PRE-FILED SETTLEMENT 20 TESTIMONY?

21 A. Yes.

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1	Q.	Sorry, Mr. Wiles. Do you have a summary of your
2		settlement testimony?
3	Α.	Yes, I do.
4	Q.	Can you please give that summary to the Commission?
5	Α.	Yes, I will.
6		(THE SUMMARY OF THE PREFILED TESTIMONY OF JAMES
7		DANNY WILES WILL BE COPIED INTO THE RECORD AS GIVEN
8		ORALLY FROM THE WITNESS STAND.)
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### DUKE ENERGY CAROLINAS, LLC Docket No. E-7, Sub 831 SUMMARY OF SETTLEMENT TESTIMONY OF J. DANNY WILES

1 My direct and rebuttal testimony in this proceeding focused on the proposed 2 deferral of program costs and amortization of such costs over the life of the applicable 3 program and the proposal to treat the earnings stream produced under the "save-a-watt" 4 Energy Efficiency Plan similarly to that which would have been produced by a 5 generating plant investment for reporting purposes. The purpose of my settlement 6 testimonv is to describe changes to the accounting and reporting treatment requested by 7 the Company in my direct testimony as a result of both the Commission's February 26, 8 2009 Order and the Agreement and Joint Stipulation of Settlement entered into among 9 the Company, Public Staff, and the Environmental Intervenors.

10 As a result of the Agreement and the Commission's Order, the Company will 11 include actual program revenues and actual program costs for purposes of calculating and 12 reporting its regulated earnings to the Commission in its quarterly ES-1 reports. It will 13 provide supplementary schedules setting forth the Company's jurisdictional earnings 14 excluding the effects of its energy efficiency and demand-side management programs. 15 The Company also will provide schedules separately stating the costs associated with 16 each program or activity, and actual revenues received from the demand-side and energy 17 Duke Energy Carolinas will provide detailed calculations efficiency programs. 18 supporting these as schedules.

Accounting rules and regulations require that the Company monitor, on an ongoing basis, the difference between financial results applicable to the save-a-watt programs that are expected ultimately to be realized based on the terms of the Agreement

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and the financial results recorded on the Company's books that result from the recovery of costs through Rider EE. When certain timing requirements are met, the Company will record a regulatory asset on its books if it appears that the level of revenues that will ultimately be recoverable based on the terms and provisions of the Agreement are greater than the level of revenues billed under the rider. On the other hand, the Company will record a regulatory liability if the level of revenues billed customers is in excess of the level of revenues that is estimated to be ultimately recoverable.

8 The terms of the Agreement are intended to provide for the recovery of program 9 costs as they are incurred and, therefore, the request for program cost deferral that was 10 referenced in my direct and rebuttal testimony is no longer needed.

Based on Commission Rule R8-27(a)(2), Duke Energy Carolinas requests that the Commission include in its order in this proceeding an ordering paragraph for regulatory accounting purposes authorizing the Company to use a regulatory asset and a regulatory liability account for the purposes I describe in my settlement testimony.

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This concludes the summary of my pre-filed settlement testimony.

E-7, Sub 831 - Volume 1 1 MS. NICHOLS: Thank you. Mr. Wiles is 2 available for cross examination. 3 CHAIRMAN FINLEY: Cross? MS. FENTRESS: No questions from the 4 5 Public Staff. 6 MR. GREEN: No questions. 7 MR. RUNKLE: No questions. No questions. 8 MR. HOLTZMAN: 9 MS. THOMPSON: No questions. 10 MR. OLSON: We have no questions. 11 CHAIRMAN FINLEY: All right. Any 12 questions of Mr. Wiles from the Commission? 13 (No response.) 14 CHAIRMAN FINLEY: You get a pass, Mr. 15 Wiles. Congratulations. 16 THE WITNESS: Thank you. MS. NICHOLS: That's what you get for 17 having such scintillating testimony. 18 19 THE WITNESS: No problem. 20 (WITNESS EXCUSED) 21 MS. HEIGEL: Thank you. At this time, 22 Mr. Chairman, we would call Steve Farmer to the 23 stand. (WHEREUPON, STEPHEN M. FARMER, WAS CALLED AS A 24

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76 E-7, Sub 831 - Volume 1 1 WITNESS, DULY SWORN, AND TESTIFIED AS FOLLOWS:) 2 THE WITNESS: I'm sorry, Your Honor. Ι 3 didn't realize Danny would be on and off guite that 4 quick. 5 DIRECT EXAMINATION BY MS. HEIGEL: 6 Q. Mr. Farmer, would you please state your full name 7 and business address for the record? 8 Α. My name is Stephen Farmer. My business address is 9 1000 East Main Street, Plainfield, Indiana 46168. 10 0. And by whom are you employed and in what capacity? 11 Α. I'm currently self-employed. I'm a former employee 12 of Duke Energy Services. 13 0. The retiree we won't quite let go of. Have you 14 previously filed testimony in this docket? 15 I have. Α. 16 0. And did you also caused to be prefiled settlement 17 supporting testimony in this docket consisting of 19 pages plus four exhibits? 18 19 Α. I did. 20 Q. And do you have any changes or corrections to your 21 testimony or exhibits at this time? 22 Α. (Nods affirmatively) 23 Would you please provide those? 0. 24 Α. I do have changes. I need to clarify some of this

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testimony as it relates to the difference in opinion between the Public Staff and the Company as to the allocation of costs between residential and nonresidential customers.

Q. Would you please provide that clarification?
A. Yes. My testimony states that the Public Staff was opposed to separating revenue requirements from residential customers as a group and nonresidential customers as a group. My testimony said that Public Staff -- we thought the Public Staff wanted to break the nonresidential customer group down by customer class basis. We are not in disagreement on that -- that point. We are both in agreement.

Now, there is a difference of opinion on how energy-efficiency costs should be allocated within the North Carolina jurisdiction. The Public Staff believes that the allocation of energy efficiency costs within the North Carolina jurisdiction should be based on relative residential and nonresidential kilowatt hour sales within the North Carolina jurisdiction.

The Company believes that the residential customers of North Carolina should pay the cost of the residential programs in North Carolina and that

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the nonresidential customers ought to pay for the nonresidential programs. Now, that change in allocation or changes in the methodology results in a significant difference in the revenue requirement assigned to the residential and nonresidential customers of North Carolina.

> MS. HEIGEL: Mr. Chairman, at this time I would move that the prefiled direct testimony of Mr. Farmer be copied into the record as if given orally from the stand, and that his Exhibits 1 through 4 be marked.

CHAIRMAN FINLEY: Farmer's supplemental testimony shall be copied into the record as if given orally from the stand, and his exhibits shall be marked 1 through 4 as premarked and filed.

MS. NICHOLS: Thank you. (THE PREFILED DIRECT TESTIMONY OF STEPHEN M. FARMER, AS CORRECTED, WILL BE COPIED INTO THE RECORD AS IF GIVEN ORALLY FROM THE WITNESS STAND, AND FARMER EXHIBITS 1 THROUGH 4 ARE MARKED FOR

IDENTIFICATION.)

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#### I. INTRODUCTION AND PURPOSE

- 0. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS. 1 2 My name is Stephen M. Farmer, and my business address is 1000 East Main Α. 3 Street, Plainfield, Indiana. 4 0. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY? 5 Α. 1 am a former employee of Duke Energy Shared Services, Inc. On December 31, 6 2006, I retired as an employee of Duke Energy Shared Services, Inc. after serving 7 Duke Energy Indiana, Inc. and its predecessor companies for over thirty-one years. I am currently self-employed and provide rate and regulatory consulting 8 9 services as an independent contractor. I have been retained by Duke Energy 10 Corporation as a consultant in the area of rates. 11 0. **DID YOU PREVIOUSLY CAUSE TO BE PRE-FILED IN THIS DOCKET** 12 **CERTAIN DIRECT AND REBUTTAL TESTIMONIES ON BEHALF OF** 13 **DUKE ENERGY CAROLINAS?** 14 Yes, I did. Α. WHAT IS THE PURPOSE OF YOUR SETTLEMENT TESTIMONY IN 15 Q. 16 **THIS PROCEEDING?** The purpose of my testimony is to explain and support certain provisions of the 17 Α. 18 Agreement and Joint Stipulation of Settlement (the "Agreement") among Duke 19 Energy Carolinas, LLC ("Duke Energy Carolinas" or the "Company") and the 20 Southern Alliance for Clean Energy, Environmental Defense Fund, Natural 21 Resources Defense Council, and the Southern Environmental Law Center
- 22 (collectively, the "Environmental Intervenors"), and the Public Staff of the North

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1 Carolina Utilities Commission (the "Public Staff") (collectively referred to as the 2 "Stipulating Parties"). In particular, I will discuss certain provisions of the 3 Settlement Terms attached to the Agreement as Exhibit B and certain aspects of Exhibit C, which sets out the various areas of compromise between the parties. 4 My testimony includes calculations that quantify the customer rate impacts that 5 6 are projected to occur as a result of the recovery of energy efficiency costs, lost revenues and incentives. The testimony of Mr. Theodore E. Schultz filed in 7 8 support of the Agreement includes a more detailed discussion of the terms 9 included in Exhibits B and C of the Settlement Agreement. As Mr. Schultz and I 10 discuss, the Agreement includes several areas of compromise by the Stipulating 11 Parties that affect the determination of costs to be recovered from customers.

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### 12 Q. MR. FARMER, WHAT HAS BEEN THE FOCUS OF YOUR 13 TESTIMONIES IN THIS PROCEEDING?

A. My testimonies in this proceeding have focused on the development of the
 proposed jurisdictional revenue requirements applicable to Duke Energy
 Carolinas' save-a-watt proposal and the development of ratemaking principles
 and provisions included in Rider EE (NC), which is the Company's proposed
 energy efficiency cost recovery mechanism.

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2	Q.	HAVE YOU PREPARED EXHIBITS THAT SUMMARIZE THE ANNUAL
3		JURISDICTIONAL REVENUE REQUIREMENT AND RATE IMPACTS
4		THAT WILL AFFECT THE BILLS OF NORTH CAROLINA RETAIL
5		ELECTRIC CUSTOMERS BASED ON THE PROVISIONS OF THE
6		SETTLEMENT AGREEMENT?

RATE IMPACTS

11.

7 Yes. Farmer Settlement Exhibit Nos. 1 through 3 include summaries and Α. 8 comparisons of the annual jurisdictional revenue requirement and rate impacts 9 that reflect the various provisions and terms of the Agreement. Farmer Settlement 10 Exhibit No. 1 includes a side-by-side comparison of annual jurisdictional 11 revenues that would have been collected during the first four years of the 12 Company's save-a-watt proposal as originally filed (amounts shown in columns B 13 through D) and the annual jurisdictional revenues that will be billed to North 14 Carolina customers for the same period assuming the Commission approves the 15 Agreement (amounts shown in columns E through I). Farmer Settlement Exhibit No. 1 shows that the sum of the jurisdictional revenue requirement based on the 16 17 terms and provisions of the Agreement is \$27.4 million (8.0%) less than the 18 Company's original filing over the four-year recovery period. As explained 19 below, there are a number of factors that contribute to the net change in revenue 20 requirement.

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Q. PLEASE EXPLAIN THE REASONS WHY THE CUMULATIVE
 JURISDICTIONAL REVENUE REQUIREMENT PROVIDED FOR IN
 THE AGREEMENT IS LESS THAN THE REVENUE REQUIREMENT
 UNDER THE COMPANY'S ORIGINAL SAVE-A-WATT PLAN OVER
 THE FOUR-YEAR COST RECOVERY PERIOD.

6 Α. There are a number of factors to consider when comparing the jurisdictional 7 revenue requirement based on the terms and provisions of the Agreement to the jurisdictional revenue requirement under the Company's originally filed Energy 8 9 Efficiency Plan. First, as originally filed, the save-a-watt proposal provided for 10 the recovery of lost revenues and program costs spread out over the life of the 11 energy efficiency and demand-side management programs that gave rise to 12 avoided cost savings. For example, if an energy efficiency program had a life of 13 ten years, the recovery of program costs would have occurred over ten years. In 14 contrast, under the provisions of the Agreement, the recovery of program costs 15 applicable to a particular vintage of energy efficiency programs will occur during 16 the program vintage year. The revenue streams under both plans are intended to 17 provide the Company the opportunity, but not a guarantee, of program cost 18 recovery. The recovery of net lost revenues, which also would have occurred 19 over the life of approved energy efficiency program under the Company's original 20 proposal, will now be limited to the level of estimated net lost revenues that are 21 expected to occur during the 36-month period that begins as of each initial vintage 22 year of customer participation in Company sponsored programs. The Agreement 23 provides that the recovery of net lost revenues applicable to vintage years three

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and four energy efficiency programs will extend two-years beyond the initial four-year cost recovery period assuming such recovery is not reduced or terminated as a result of the explicit or implicit recovery of net lost revenues as part of a general rate case or comparable proceeding. The Company estimates that the combined sum of net lost revenues subject to recovery by North Carolina customers in years five and six will total approximately \$54 million at 85% of targeted achievement levels, if not reduced or terminated earlier.

8 The Stipulating Parties have agreed to mitigate any potential overbilling of 9 costs to customers by initially billing customers at a rate that assumes the 10 Company will achieve 85% of its targeted avoided cost savings goals (revenues 11 under the Company's original proposal assumed the Company would achieve 12 100% of its targeted goals). The Agreement provides for an annual true-up 13 process in order to adjust jurisdictional revenue requirement to reflect historical 14 customer participation levels in addition to any changes or updates to forecasted 15 customer participation levels. In addition, the Agreement provides for a true-up 16 after the end of the four-year period that will capture differences, not only due to 17 actual versus projected customer participation levels, but also differences that 18 may arise due to projected versus verified program impacts. Finally the end-of-19 period true-up will capture any adjustment that may result from the cap on 20 Company earnings provided for in the Agreement. The Settlement Agreement 21 jurisdictional revenue requirement shown on Farmer Settlement Exhibit Nos. 1 22 through 3 assumes the Company achieves 85% of the avoided cost savings 23 targeted across the Duke Energy Carolinas' system. Any difference between

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Settlement Testimony: STEPHEN M. FARMER Duke Energy Carolinas, LLC NCUC Docket No. E-7, Sub 831

amounts due the Company based on actual avoided cost savings realized by
 customers and amounts billed customers at 85% of target achievement will be
 collected from or refunded to customers as part of the annual and/or end of period
 true-up.

5 As explained by Mr. Schultz, the Settlement Agreement provides for a 6 significant increase in the level of kilowatt-hour savings compared to the 7 Company's original filing. For example, energy efficiency programs applicable 8 to the third and fourth vintage years have been scaled up to achieve customer 9 kWh savings of 0.5% and 0.75% of sales, respectively. These customer savings, 10 which represent increases of over 80% and 150% when compared to the 11 Company's original Energy Efficiency Plan, will result in an increase in the level 12 of jurisdictional revenue requirement.

# 13Q.MR. FARMER, WHAT ARE SOME OF THE OTHER DRIVERS OF THE14DIFFERENCEBETWEENJURISDICTIONALREVENUE15REQUIREMENTS UNDER THE COMPANY'S PLAN AS ORIGINALLY16FILED AND JURISDICTIONALREVENUEREQUIREMENTS UNDER

17 THE AGREEMENT?

A. The Agreement includes a number of other changes and modifications, which will
 impact the recovery of jurisdictional revenue requirement. For example, as
 explained by Mr. Schultz, Section C of the Settlement Terms states that when
 developing jurisdictional revenue requirement, the Company will utilize 75% of
 avoided capacity costs applicable to demand response programs and 50% of the
 net present value of avoided capacity and energy costs applicable to energy

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conservation programs. Jurisdictional revenues in the Company's original filing 1 2 were based on 90% of estimated avoided capacity and energy cost savings. The 3 Stipulating Parties agreed to limit the effect that potential increases in future 4 avoided capacity and energy cost rates might have on the calculation of 5 jurisdictional revenue requirement by fixing the MWh and MW-per-year avoided 6 energy cost and avoided capacity cost rates at the onset of the plan subject to 7 certain limited adjustments. The Agreement includes other provisions that limit 8 the recovery of energy efficiency and demand-side management costs as outlined 9 in the testimony of Mr. Schultz. For example, after-tax earnings on actual 10 program costs will be capped at graduated percentage return levels based on the 11 percentage achievement of targeted avoided cost savings. Finally, revenue 12 requirement determinations do not reflect the revenue reshaping provisions 13 included in the original filing. The changes in concepts and terms discussed 14 above are implicitly included in the Agreement through the calculation of the 15 projected system avoided cost savings of \$754 million.

### 16 Q. DOES THE SETTLEMENT CHANGE THE COMPANY'S ALLOCATION

### 17 OF COSTS AND BENEFITS OF DEMAND-SIDE MANAGEMENT

### 18 **PROGRAMS TO NORTH CAROLINA RETAIL CUSTOMERS?**

A. Yes. As part of the Settlement, the Environmental Intervenors and Duke Energy
 Carolinas agreed to make a change to the way costs associated with demand-side
 management costs are allocated. For purposes of determining the North Carolina
 retail revenue requirement, Duke Energy Carolinas and the Environmental
 Intervenors agree that for demand-side management programs, inputs will be

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1 allocated between the North Carolina and South Carolina retail jurisdictions based 2 on contributions to system retail peak demand by all system retail customers 3 based on the Company's cost of service study. The save-a-watt proposal, as 4 originally filed, provided that for demand-side management programs inputs 5 would be allocated between the North Carolina and South Carolina retail 6 jurisdictions based on kWh sales to system retail customers. For energy 7 efficiency programs and net lost revenues, inputs will be assigned to the North 8 Carolina and South Carolina retail jurisdictions based on kWh sales to system 9 retail customers from the cost of service study. Program costs applicable to 10 energy efficiency and demand-side management programs will be allocated 11 between North Carolina and South Carolina jurisdictions on the same basis as 12 revenue requirement.

13 FARMER. DUKE ENERGY CAROLINAS AND THE 0. MR. 14 ENVIRONMENTAL INTERVENORS HAVE AGREED THAT REVENUE 15 **REOUIREMENT WILL BE ALLOCATED TO NORTH CAROLINA AND** 16 SOUTH CAROLINA RETAIL CUSTOMERS ONLY AND THAT NO 17 PORTION THE SETTLEMENT AGREEMENT OF REVENUE 18 REOUIREMENT WILL ALLOCATED BE TO WHOLESALE 19 CUSTOMERS. PLEASE EXPLAIN THE RATIONALE FOR THIS 20 DECISION.

A. Because the Company's energy efficiency and demand-side management
 programs included in the portfolio of programs approved in this proceeding are
 programs directed specifically to Duke Energy Carolinas' retail customers, the

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Company believes it is appropriate to recover the costs of such programs only 1 2 from these customers. Like Progress Energy Carolinas and the Commission, 3 Duke Energy Carolinas interprets N.C. Gen. Stat. § 62-133.9(e) to mean that costs 4 of new energy efficiency and demand-side management programs should "be recovered only from those customer classes eligible to participate in the program 5 and to which the program is targeted." Order Approving Agreement and 6 7 Stipulation of Partial Settlement, Subject to Certain Commission-Required Modifications, Docket No. E-2, Sub 931, at 30 (June 15, 2009). 8

9 Q. DO YOU DISPUTE THE FACT THAT ALL CUSTOMERS LIKELY WILL

10 RECEIVE INDIRECT BENEFITS FROM THE COMPANY'S ENERGY 11 EFFICIENCY PROGRAMS?

A. No, I am simply making the point that to comply with N.C. Gen. Stat. § 6213.9(e) the costs of a program or measure should be recovered from those
customers eligible to participate in the program. Duke Energy Carolinas believes
its allocation methodology is more consistent with the North Carolina General
Assembly's use of the words "only" and "directly" in this statute, which provides
that:

18The Commission shall determine the appropriate assignment of19costs of new demand-side management and energy efficiency20measures for electric public utilities and shall assign the costs of21the programs only to the class or classes of customers that22directly benefit from the programs. [Emphasis added.]23

24 N.C. Gen. Stat. § 62-133.9(e).

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Q. DOES THE PUBLIC STAFF SUPPORT THE METHOD AGREED TO BY
 DUKE ENERGY CAROLINAS AND THE ENVIRONMENTAL
 INTERVENORS FOR ALLOCATING THE REVENUE REQUIREMENT
 TO NORTH CAROLINA RETAIL CUSTOMERS?

A. No. The Public Staff did not agree to this proposed method and the Stipulating
Parties have agreed to present the issue of the appropriate jurisdictional allocation
method to the Commission through testimony.

8 Q. HAVE THE STIPULATING PARTIES ACCEPTED THE ALLOCATION 9 OF ENERGY EFFICIENCY AND DEMAND-SIDE MANAGEMENT 10 REVENUE REQUIREMENT BETWEEN NORTH CAROLINA AND 11 SOUTH CAROLINA JURISDICTIONS BASED ON KILOWATT-HOURS 12 SALES AND CONTRIBUTION TO PEAK DEMAND, RESPECTIVELY?

A. Yes, the Stipulating Parties accept the allocation of energy efficiency and
demand-side management revenue requirement to the North Carolina and South
Carolina jurisdictions based on kilowatt-hour sales and contribution to peak
demand. The only remaining item of contention is that the Public Staff believes it
would be more appropriate to allocate revenue requirement on a class-by-class
basis rather than on a "residential" and "non-residential" basis as proposed by
Duke Energy Carolinas and as accepted by the Environmental Intervenors.

20 Q. IS THE COMPANY PROPOSING ANY CHANGES FROM ITS 21 ORIGINAL FILING TO HOW IT ALLOCATES ENERGY EFFICIENCY 22 AND DEMAND-SIDE MANAGEMENT REVENUE REQUIREMENT 23 AMONG NORTH CAROLINA RETAIL CUSTOMERS?

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A. No. Under the Company's allocation proposal, residential and non-residential
 customers will pay their respective share of energy efficiency and demand-side
 management program costs, lost revenues, and incentives based on the percentage
 of system kilowatt-hour sales consumed and peak demands contributed by
 residential and non-residential customers, respectively.

SUPPORT 6 0. DOES THE PUBLIC STAFF THE **COMPANY'S** ALLOCATION OF ENERGY EFFICIENCY AND DEMAND-SIDE 7 8 MANAGEMENT REVENUE REQUIREMENT AMONG NORTH 9 **CAROLINA RETAIL CUSTOMER GROUPS?** 

10 A. No, the Public Staff opposes the Company's combination of non-residential retail 11 customers into one group for purposes of allocating the revenue requirement. The 12 Company chose to combine non-residential customers into one class in 13 recognition of the fact that programs offered within the non-residential classes cut 14 across various rate groups. In addition, the Company's goal was to reduce 15 complexity when administering the Rider.

Q. HAVE YOU PREPARED EXHIBITS THAT PROVIDE ESTIMATES OF
 THE CHANGE IN RATES THAT WOULD OCCUR AS A RESULT OF
 THE RECOVERY OF ENERGY EFFICIENCY AND DEMAND-SIDE
 MANAGEMENT COSTS AFTER REFLECTING THE EFFECTS OF THE
 SETTLEMENT AGREEMENT?

A. Yes. Farmer Settlement Exhibit No. 2 shows the estimated percentage change in
 retail rates for residential and non-residential customers that would occur during
 the four-year cost recovery period based on the terms of the Agreement. In

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addition. Farmer Settlement Exhibit No. 3 includes calculations of monthly billing 1 2 factors for residential and non-residential customers that can be used to evaluate 3 the impact of the recovery of energy efficiency costs by individual customers. As shown on Farmer Settlement Exhibit No. 2, residential and non-residential rates ۵ 5 will increase by 1.47% and 0.68%, respectively, during the first year of the fouryear cost recovery period when compared to 2008 annual jurisdictional revenues. 6 7 Residential and non-residential rates will increase by 4.93% and 2.14%. 8 respectively, during the fourth year. It is important to keep in mind that customers who participate in programs offered by the Company will likely, 9 depending on the level of participation, reduce their net bill below the level that 10 would have been incurred had the Company's energy efficiency and demand-side 11 management programs not been in place. Customers who do not participate in 12 13 programs offered by the Company will benefit to the extent the Company's 14 energy efficiency and demand-side management programs lower the marginal 15 cost of energy and capacity below the level that would have been incurred had the 16 Company not been able to realize avoided cost savings. The rate impacts shown on Farmer Settlement Exhibit Nos. 1 and 2 do not include the savings discussed 17 18 above that will be realized by customers who participate in Company sponsored 19 programs. In addition, the impacts of customers "opting out" of Rider EE (NC) are not included in the exhibit. The percentage change in individual customer 20 21 rates caused by the implementation of Rider EE (NC) will be dependent on the level of power consumed by the individual customer. 22

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As shown on Farmer Settlement Exhibit No. 3, the monthly billing factor for a residential customer taking service under Rate RS is estimated to be S0.001206 per kWh during the first year of the four-year cost recovery period. The estimated monthly billing factor increases to \$0.004207 per kWh in the last year of the four-year cost recovery period. The monthly bill of a typical residential customer using 1,000 kilowatt-hours will increase by \$1.21 and \$4.03, respectively during the first and fourth years.

8

#### III. <u>NET LOST REVENUES</u>

## 9 Q. MR. FARMER, DO THE SETTLEMENT TERMS PROVIDE FOR THE 10 RECOVERY OF NET LOST REVENUES?

11 Yes, the various provisions relating to the recovery of net lost revenues are set out Α. 12 in Exhibit B, Section G of the Agreement. Section G includes a table that shows the projected annual level of net lost revenues that is expected to occur during the 13 14 six-year recovery period provided for in the Agreement. As shown on this table, 15 the estimated amount of net lost revenues to be collected from North Carolina customers totals \$151 million at 85% achievement. The recovery of net lost 16 17 revenues will be subject to adjustment (either up or down) based on the level of verified kW and kWh reductions actually realized. At a savings level that equals 18 19 100% of target achievement the recovery of lost revenues would total 20 approximately \$178 million. As explained earlier in my testimony, the recovery 21 of net lost revenues applicable to energy efficiency programs for vintage years 22 three and four will extend two-years beyond the initial four-year cost recovery period assuming such recovery does not terminate or is not reduced as a result of 23

approval of a decoupling or alternative recovery mechanism or an order in a
 general rate proceeding that provides for the recovery of net lost revenues.

### 3 Q. HOW WILL THE COMPANY CALCULATE NET LOST REVENUES 4 UNDER THE AGREEMENT?

5 A. The calculation of net lost revenues (sometimes referred to as lost margins) was 6 estimated by multiplying the portion of the Company's tariff rates that represent 7 the recovery of fixed costs by the estimated kW and kWh reductions applicable to 8 energy efficiency programs. The calculation of net lost revenues does not apply 9 to demand-side management programs. The Company calculated the portion of 10 retail tariff rates representing the recovery of fixed costs by deducting the 11 recovery of fuel costs from its tariff rates.

12 Q. DID THE COMPANY'S ORIGINAL SAVE-A-WATT PROPOSAL CALL

### 13 FOR THE EXPLICIT RECOVERY OF NET LOST REVENUES?

14 A. No. There was no explicit recognition or recovery of net lost revenues. The 15 recovery of net lost revenues was embedded in the revenue requirement 16 calculations that were based on 90% of estimated avoided capacity and energy 17 costs included in the Company's original filing. The reduced percentages of 18 avoided costs used to determine revenue requirement set forth in Section C of 19 Exhibit B of the Agreement, were calculated recognizing that net lost revenues 20 would be recovered separately.

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### IV. TRUE-UP

### 22 Q. DO THE SETTLEMENT TERMS PROVIDE FOR A TRUE-UP 23 PROCESS?

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1 Α. Yes. As explained above, the Settlement Agreement provides for series of annual 2 true-ups that will be conducted to update revenue requirements based on actual 3 customer participation results. Revenues will be collected from customers based 4 on the annual participation true-up results plus an updated forecast of customer 5 participation in the Company's energy efficiency and demand-side management 6 programs. A final true-up process, based on independently measured and verified results will take place after the evaluation of the program results when the four-7 year period is complete. At that time, amounts due the Company based on the 8 9 terms of the Agreement will be compared to revenues collected from customers. 10 Any difference will be flowed through to customers or will be collected from 11 customers, as the case may be. If there are amounts owed to customers, such 12 amounts will be refunded with interest at a rate to be determined by the Commission in the first true-up proceeding in which an over collection occurs. 13 14 Net lost revenues will be included in the final true-up process at the end of the 15 four-year plan. The outstanding balance of net lost revenues will be adjusted based on the actual measured and verified lost revenues determined in the final 16 17 true-up process.

18 The true-up process will capture the effects of a number of reconciliations. 19 For example, the true-up process will capture the difference between revenues 20 billed customers based on 85% of targeted energy efficiency program avoided 21 cost savings billed customers (revenue requirement calculated based on 50% of 22 life-time net present value savings) and 85% of targeted demand-side 23 management program avoided cost savings billed customers (revenue requirement

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1 calculated based on 75% of nominal dollar savings over the four-year recovery 2 period) and revenues due the Company based on the applicable percentage of 3 verified energy efficiency and demand-side management avoided cost savings 4 actually realized. The true-up process will capture the difference between lost 5 revenues billed customers and the recovery of net lost revenues owed the 6 Company based on verified MW and MWh savings. The true-up process also will 7 include calculations that ensure that the level of compensation recovered by the 8 Company is capped so that the after-tax rate of return on actual program costs 9 applicable to energy efficiency and demand-side management programs does not 10 exceed the predetermined earnings cap levels set out in the Agreement.

Q. PLEASE SUMMARIZE THE PROCESS THAT WILL BE USED TO
 ENSURE THAT COMPANY EARNINGS APPLICABLE TO THE SAVE A-WATT PROGRAM DO NOT EXCEED THE PRÉDETERMINED
 LEVELS SET OUT IN THE AGREEMENT.

15 First, let me emphasize that the Agreement does not guarantee or ensure that the Α. 16 Company will realize or achieve the earnings levels set out in the Agreement. 17 The Company assumes the risk that projected savings will not materialize and that 18 revenues received from customers based on the percentage of avoided cost 19 savings retained by the Company will not result in any management incentive or 20 cover the costs of energy efficiency and demand-side management programs. 21 Having said that, the process used to determine compliance with the earnings cap 22 provision will be as follows. The Company will calculate the level of after-tax 23 earnings, on a net present value basis, that would be produced by deducting actual

1 program costs incurred during the four-year settlement period from the 2 cumulative revenue level to which the Company is entitled based on the 3 provisions of the Agreement. The cumulative revenue level, which will exclude 4 the recovery of lost revenues, will be calculated by applying the various 5 provisions set out in the discussion of the true-up process above. The Company 6 will then apply the appropriate tax factors in order to determine the after-tax 7 earnings level produced by these values. The after-tax earnings level will be 8 divided by actual program costs incurred in order to determine the percentage 9 return (*i.e.*, rate of return) on actual program costs. The Company will compare 10 the rate of return on actual program costs produced by this calculation to the rate 11 of return cap (i.e., management incentive) that is provided for in Section F of the Agreement taking into consideration the percentage of avoided cost savings 12 13 actually realized relative to the \$754 million of targeted system avoided costs 14 savings (see chart below). If the rate of return on actual program costs is less than 15 the capped level provided for in the Agreement, in other words, if the Company is 16 not able to realize the level of earnings that are provided for in the Agreement, 17 then no further adjustment will be made. If, on the other hand, the rate of return 18 on actual program costs incurred exceeds the level provided for in the Agreement, 19 then the excess earnings level (grossed-up for applicable taxes) will be refunded 20 to customers. The performance targets and earnings caps levels set out in Section 21 F-1 of the Agreement are as follows:

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% of Target Achievement	Earnings Cap
≥90%	15%
80% to 89%	12%
60% to 79%	9%
<60%	5%

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### Q. PLEASE EXPLAIN FARMER SETTLEMENT EXHIBIT NO. 4.

Farmer Settlement Exhibit No. 4 is a revision of the Rider EE (NC) tariff that was 4 Α. 5 previously filed with the Commission that incorporates the provisions of the 6 Agreement. Duke Energy Carolinas is requesting Commission approval of the 7 tariff provisions and rates included on Farmer Settlement Exhibit No. 4. V. **CONCLUSION** 8 9 Q. WERE FARMER SETTLEMENT EXHIBIT NOS. 1-4 PREPARED BY YOU OR AT YOUR DIRECTION? 10 11 Α. Yes. DOES THIS COMPLETE YOUR TESTIMONY IN SUPPORT OF THE 12 0. **AGREEMENT AND JOINT STIPULATION OF SETTLEMENT?** 13 14 Α. Yes, it does.

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	E-7, Su	ub 831 - Volume 1
1	Q.	(By Ms. Nichols) Mr. Farmer, do you have a summary
2		of your testimony?
3	А.	I do.
4	Q.	Can you please provide that at this time?
5	А.	Yes.
6		(THE SUMMARY OF THE PREFILED TESTIMONY OF STEPHEN
7	1	M. FARMER WILL BE COPIED INTO THE RECORD AS GIVEN
8		ORALLY FROM THE WITNESS STAND.)
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### DUKE ENERGY CAROLINAS, LLC Docket No. E-7, Sub 831 SUMMARY OF SETTLEMENT TESTIMONY OF STEPHEN M. FARMER

1 The purpose of my testimony is to explain and support certain provisions of the 2 Agreement and Joint Stipulation of Settlement among the Stipulating Parties and, more 3 specifically, to describe differences in customer rate impacts and jurisdictional revenue 4 requirement between the original save-a-watt filing and the Settlement Agreement.

5 My testimony explains that the cumulative jurisdictional revenue that will be 6 billed North Carolina retail customers over the initial four-year cost recovery period, 7 based on the negotiated provisions and terms of the Agreement, is less than the revenue 8 requirement that would have been billed customers under the Company's original save-a-9 watt plan. My testimony explains that the Agreement provides for the limited recovery of 10 net lost revenues and that such recovery will end two after the end of the initial four-year 11 cost recovery period. My testimony includes an explanation of the various factors that 12 affect the level of revenue that will be collected by the Company.

13 My testimony explains that the Stipulating Parties have agreed to mitigate any 14 potential overbilling of costs to customers by initially billing customers at a rate that 15 assumes the Company will achieve 85% of its targeted avoided cost savings goals (as 16 opposed to the Company's original assumption of 100%). I explain that the Agreement 17 provides for an annual true-up process in order to adjust jurisdictional revenue 18 requirement to reflect historical customer participation levels in addition to any changes 19 or updates to forecasted customer participation levels. In addition, the Agreement 20 provides for a final true-up after the end of the initial four-year cost recovery period that 21 will capture differences not only due to actual versus projected customer participation

levels but also projected versus independently verified program impacts. The end-ofperiod true-up also will capture any adjustment that may result from the cap on Company earnings provided for in the Agreement that is more fully explained in my testimony. Differences between amounts due the Company based on actual avoided cost savings realized by customers and amounts billed customers at 85% of target achievement will be collected from or refunded to customers as part of the annual and/or end of period trueup. ۱.

8 Because the Company's energy efficiency and demand-side management 9 programs included in the portfolio of programs approved in this proceeding are programs 10 directed specifically to Duke Energy Carolinas' retail customers, the Company believes it 11 is appropriate to recover the costs of such programs only from these customers. The 12 Public Staff did not agree to this proposal. The Public Staff believes that a portion of the 13 save-a-watt revenue requirement should be allocated to the Company's wholesale 14 customers. The Agreement provides that inputs applicable to demand-side management 15 programs be allocated between the North Carolina and South Carolina retail jurisdictions 16 based on contributions to system retail peak demand by all system retail customers based 17 on the Company's 2008 cost of service study. Inputs for energy efficiency programs and 18 net lost revenues have been assigned to the North Carolina and South Carolina retail 19 jurisdictions based on kilowatt-hour sales to system retail customers also from the cost of 20 service study. Program costs applicable to energy efficiency and demand-side 21 management programs will be allocated between North Carolina and South Carolina 22 jurisdictions on the same basis as the revenue requirement. Under the provisions of the

Agreement, the recovery of program costs applicable to a particular vintage of energy efficiency programs will occur during the program vintage year.

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3 Although there was no explicit recognition or recovery of net lost revenues in the 4 Company's original save-a-watt proposal, the Settlement terms provide for the limited 5 The reduced percentages of avoided costs used to recovery of net lost revenues. determine revenue requirement set forth in the Agreement were calculated recognizing 6 7 that net lost revenues would be recovered separately. The recovery of net lost revenues 8 will be subject to adjustment (either up or down) based on the level of independently 9 verified kW and kWh reductions actually realized. The recovery of net lost revenues will 10 be limited to the level of estimated net lost revenues that are expected to occur during the 11 36-month period that begins as of each initial vintage year of customer participation in 12 Company sponsored programs.

The Agreement includes a number of other changes and modifications that will impact the recovery of jurisdictional revenue requirement, which my pre-filed testimony describes in detail. The changes in concepts and terms discussed in my testimony are implicitly included in the Agreement through the calculation of the projected system avoided cost savings of \$754 million.

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This concludes the summary of my settlement testimony.

100 E-7, Sub 831 - Volume 1 1 MS. NICHOLS: Mr. Farmer is now available 2 for cross examination. CHAIRMAN FINLEY: Cross examination? 3 Mr. 4 Green. 5 Thank you, Mr. Chairman. MR. GREEN: 6 CROSS EXAMINATION BY MR. GREEN: 7 0. Good morning, Mr. Farmer. 8 A. Good morning, Mr. Green. 9 Q. On page 14 of your testimony lines, 11 through 16, 10 you reference the Settlement Agreement Section G 11 regarding net lost revenues. Would you look at the 12 Settlement Agreement that's Mr. Schultz's Exhibit 13 On page 22, that section G, net lost revenues? 1? 14 Α. Would you give me the page reference again? 15 It's page 22. Q. 16 Okay. I have it. Α. 17 All right. The table in section G sets forth the ο. 18 net lost revenues that are estimated to be received 19 by Duke under the settlement with energy efficiency 20 savings at 85 percent. Is that correct? 21 Α. That's correct. 22 Q. And looking at Table G -- in the table in G, it 23 sets the net lost revenues to be received by Duke 24 in year one at \$7.7 million. Correct?

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1	А.	That's correct.
2	Q.	And in year two it would be 16.5 million?
3	А.	Correct.
4	Q.	In year three the net lost revenues would be 29.9
5		million?
6	А.	Yes.
7	Q.	In year four the net lost revenues would be 42.3
8		million?
9	Α.	That's also correct.
10	Q.	In year five they would be 33.9 million?
11	Α.	That's right.
12	Q.	And in year 6 they would be 20.5 million?
13	Α.	Yes.
14	Q.	So the total net lost revenues over the six-year
15		revenue stream would be \$151 million?
16	Α.	That's correct.
17	Q.	Looking at section F of the Settlement Agreement,
18		which is on page 21 of Schultz Exhibit B, the table
19		there states the save-a-watt earnings cap at
20		different levels of energy efficiency savings. Is
21		that correct?
22	Α.	Yes.
23	Q.	At the 85 percent energy efficiency savings level,
24		the earnings cap is 12 percent. Correct?

102E-7, Sub 831 - Volume 1 1 Α. Yes. The second sentence below the table there showing 2 0. 3 the earnings cap states, "Earnings shall be calculated as an after tax rate of return on the 4 actual program costs incurred by the Company over 5 the four-year plan period on a net present value 6 7 basis." Does that mean that the 12 percent 8 earnings cap will not be calculated on an annual 9 basis? 10 Α. That's true. After -- actually, the earnings calculation will be done, first of all, at the end 11 12 of the -- after the end of the four-year period so 13 that the earnings of the company are assessed over 14 the entire four-year period rather than on an annual period -- on an annual basis. 15 So the sentence provides that the net present value of the 16 17 revenues and the expenses that are incurred during 18 that four-year period will be used to calculate the 19 percentage rate of return on the actual program 20 cost. 21 Q. So the 12 percent earnings cap reflected there will 22 be calculated using four years of revenue received by the Company divided by four years of the program 23 24 cost?

103E-7, Sub 831 - Volume 1 1 Α. There are other parts of the calculation; for example, income taxes and other related taxes, 2 3 other costs. But if you include that in the definition of cost, then that's the case. 4 The 5 earnings -- the cap -- and to look at earnings, the restriction -- cap on earnings basically is a cap 6 7 on the earnings over the entire four-year period. And the four years of revenues used to calculate 8 Q. 9 the earnings cap will not include any net lost revenues. Is that correct? 10 That's correct. 11 Α. 12 MR. GREEN: Mr. Chairman, may I approach 13 the witness? 14 Yes, sir. CHAIRMAN FINLEY: 15 MR. GREEN: Mr. Chairman, I have handed 16 the witness a document that I have marked Attorney General's Farmer Cross Examine Exhibit No. 1. 17 18 CHAIRMAN FINLEY: This paper writing will 19 be marked for identification as Attorney General's 20 Farmer Cross Examination Exhibit No. 1. (ATTORNEY GENERAL FARMER CROSS EXAMINATION 21 22 EXHIBIT NO. 1 WAS MARKED FOR IDENTIFICATION.) 23 Ο. (By Mr. Green) Mr. Farmer, have you seen this 24 Exhibit 1 before?

104E-7, Sub 831 - Volume 1 Α. I have. 1 I believe this is a data request provided by my 2 Ο. 3 office that you responded to? 4 Α. It was prepared by individuals within the Yes. 5 I've reviewed the schedule. Company. 6 MR. GREEN: And just for the record, I --I had a discussion with Duke counsel about whether 7 8 or not there's any confidential information in this 9 docket -- in this document. And my understanding 10 is that it's not. 11 MS. HEIGEL: That's correct. 12 On Table 1, the first column labeled NPV is the net Q. 13 present value of the amounts listed below that 14 heading. Is that correct? 15 Α. That's correct. 16 The last entry in the first column, which is line Q. 17 13 labeled ROI, is your calculation of the return 18 on investment that Duke will receive if net lost 19 revenues are included in the after tax earnings 20 calculation. Is that correct? 21 Α. That's correct. 22 0. And that calculation is 58.8 percent. Right? 23 Α. That assumes that -- first of all, that the Yes. 24 revenue recovered through the -- through the

105E-7, Sub 831 - Volume 1 1 Company's tracker representing the recovery of net lost revenues is not offset or, in effect, it's --2 3 in effect it's assuming that there is no negative effect of reducing sales and reducing the revenue 4 5 stream from the Company and that there is -- there is no effect of that on -- on Company earnings 6 7 because it's -- it basically is -- the economic effect of that is zero. 8 9 You calculated the ROI of 58.8 percent by dividing Q. 10 the after tax margin on line 12, which is 92.1 11 million, by the program cost on line 8 which is 12 156.6 million. Is that correct? 13 Α. Yes. 14 Looking at the second page on Table 2, the first Q. 15 column on that table labeled NPV is the net present 16 value of the amounts listed below that heading. Is 17 that correct? 18 Α. Yes. Comparing Table 1 and Table 2, the main difference 19 Q. 20 between those is on line 6, where on Table 2 you 21 have included net lost revenues as a cost. Is that 22 correct? 23 Α. Yes. In Table 2 the inclusion of net lost revenues as 24 0.

106E-7, Sub 831 - Volume 1 1 revenue on line 2 and as a cost on line 6 means that those two items cancel each other out, and net 2 3 lost revenues are not included in the ROI calculation. Is that correct? 4 5 Α. That's correct. 6 Q. The last entry in the first column on Table 2, line 7 number 13, labeled ROI is your calculation of the return on investment that Duke will receive if net 8 9 lost revenues are not included in the after tax 10 earnings calculation. Is that correct? That is correct. 11 Α. 12 Net return on investment is 11.1 percent. Q. Correct? 13 Α. Yes, all these numbers obviously based on the 14 estimates of revenues and expenses that are -- that 15 are included in the Company's plan. The -- yes, 16 the return on investment or return on program cost 17 is 11.1 percent which, you know, it's less than the 18 cap, the authorized percentage return of 12 19 percent. 20 Q. You calculated the ROI on that Table 2 of 11.1 21 percent by dividing the after tax margin on line 2 22 -- excuse me, line 12, which is 17.3 million by the 23 program cost on line 8, which is 156.6 million. Is 24 that correct?

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	E-7, Su	ub 831 - Volume 1
1	A.	That's correct.
2	Q.	And based on the information in Tables 1 and 2,
3	-	inclusion of net lost revenues in the save-a-watt
4		return on investment shows that Duke's save-a-watt
5		return on investment to be a little over five times
6		the Company's ROI when net revenues are not
7		included in the calculation. Is that correct?
8	А.	Could you restate that again, please?
9	Q.	Based on the information in Tables 1 and 2, the
10		inclusion of net lost revenues in the save-a-watt
11		ROI shows Duke's save-a-watt ROI to be a little
12		over five times the Company's ROI when net lost
13		revenues are included or not included in the
14		calculation?
15	А.	Yes, that's correct. And it gives you a sense of
16		how important the recovery of net lost revenues are
17		to the Company.
18	Q.	And Duke's present authorized overall rate of
19		return on its generation business is 8.57 percent.
20		Is that correct?
21	А.	I believe that's correct taking into consideration
22		both the debt and equity components of the return,
23		the the combined rate of return I believe is in
24		that in that range. I think that's a return on

108 E-7, Sub 831 - Volume 1 1 rate base, jurisdictional rate base. 2 MR. GREEN: Thank you, Mr. Farmer. Ι have no additional questions. 3 CHAIRMAN FINLEY: Mr. Runkle. 4 5 CROSS EXAMINATION BY MR. RUNKLE: Good morning, Mr. Farmer. 6 Q. 7 Good morning. Α. I'd also like to look at the net lost revenues. 8 0. 9 And as I understand it, there are -- the Company is 10 not seeking net lost revenues on the DSM program. 11 Is that correct? 12 Α. That's correct. 13 0. Now, is -- what's the rationale for that? 14 That -- that basically, the demand response Α. 15 recovers the cost of the program. There is --16 there would be no net lost revenues at the -- at 17 recovering capacity. In fact, if you -- looking at a peak time, if you 18 Q. 19 spend a dollar on a DSM program, you don't have to 20 provide that -- the amount of electricity needed at 21 the peak period. Is that correct? 22 Α. When you say the amount of electricity, are you 23 defining that as kW or kWh? Yes, the statement is 24 true.

109 E-7, Sub 831 - Volume 1 1 Q. So for -- for a demand-side management program, the 2 Company actually benefits, does it not? You don't 3 have to spend as much money on a DSM program that you do as providing a new power plant or purchasing 4 5 from somebody else? 6 Α. Yes, and that's embedded in the -- the calculation 7 of revenue requirement. Revenue requirement in 8 this proceeding, which is based on the percentage of avoided cost, that's all taken into 9 10 consideration. 11 0. Okay. All right. 12 And on your question, your earlier question on net Α. 13 lost revenue and whether the Company is -- why it has not included any calculations of revenues that 14 15 might be lost due to demand-side management 16 programs, you know, I'd add on that that there is a net lost revenues -- there is a reduction in 17 18 revenues that occurs as -- as peaks are reduced by 19 demand-side management programs. If you think 20 about a -- for example, an industrial customer 21 that's on a demand energy rate, and if you lower 22 the demands then you're going to lower the -- the 23 revenue from that -- that customer. The bottom 24 line, even though there is net lost revenue on

110E-7, Sub 831 - Volume 1 1 demand-side management programs, the Company has 2 chosen to not ask for recovery of those. 3 0. And then -- so on the energy efficiency side, describe what you mean by lost revenues? 4 What does 5 that encompass? Α. 6 The energy efficiency side has customers reduce 7 their load, their usage of energy, then obviously 8 they will -- the revenue received from that 9 customer will also be reduced. That reduction in 10 revenue received from the customer will include not 11 only a reduced variable cost but also it will 12 represent a reduction in revenues to the Company to 13 recover -- to cover its fixed costs. 14 0. And now on the net, what is -- what is netted out 15 of the lost revenues? 1.6 Α. It's net of the variable costs so that the 17 calculation of net lost revenues represents that 18 portion of the reduction in revenues that 19 represents the contribution to the recovery of 20 fixed costs. 21 0. Now, are you familiar with Mr. Colton's testimony? 22 Α. Generally, not really that familiar. I believe I 23 may have skimmed that one time, but no. 24 Q. He -- he presents a case that in looking at the net

111E-7, Sub 831 - Volume 1 1 lost revenues that you need to consider some 2 utility nonenergy benefits. Are you familiar with that concept? 3 Α. I do recall that he was -- had some testimony that 4 5 maybe talked about societal benefits. And are there -- are there actual benefits to the 6 ο. 7 Company for having energy efficiency programs as 8 opposed to building new coal or nuclear plants? 9 A. Well, certainly there is the direct benefit that's 10 those costs that would be avoided due to reduction 11 in peak loads and reduction in load throughout the 12 off-peak and both on-peak. There is that direct 13 relationship. But --14 Well, let me suggest goodwill. Would a -- would a Q. 15 Company that has an ambitious energy efficiency 16 program have more goodwill than one that is 17 building coal and nuclear plants? 18 Well, yes, certainly they would. And the Company Α. 19 has made its position pretty clear on this, that 20 they aggressively want to pursue energy efficiency 21 and demand response, and there's certainly a 22 feeling in the community that that's a good thing, 23 and the Company is supportive of it. In fact, has 24 been a leader in it. So there's an amount of

	E-7, S	Sub 831 - Volume 1
1		goodwill there, although for purposes of what I do,
2		and that's calculating the nuts and bolts of what
3		the costs of the business are and who pays, then
4		goodwill is not a factor I would take into
5		consideration.
6	Q.	Can you monitarize goodwill for a company?
7	А.	No. I don't know how I would do that. I think it
8		would be pretty difficult.
9	Q.	Now, the Company spends money for goodwill
10		advertising, does it not?
11	А.	It does. You know, any company, I believe, wants
1 <b>2</b>		to be a good corporate citizen. Certainly Duke
13		does and I believe that it has been an excellent
14		corporate citizen in the state of North and South
15		Carolina. And quite frankly, it's just the way
16		business should be done. That's that's the
17		standard that we ought to be held to as companies,
18		I believe.
19	Q.	Would a Company that has an ambitious energy
20		efficiency program have a better bond rating than
21	i	one that was looking to build new coal plants and
22		new nuclear plants?
23	Α.	Well, I I think it we had testimony by a
24		witness earlier in this proceeding on that. I

E-7, Sub 831 - Volume 1 think it depends on -- number one, it depends on 1 what the cost recovery mechanism is because we're 2 talking about several millions of dollars of cost 3 4 to be incurred to put these programs in place that 5 allow customers another tool to -- to -- to control 6 the amount of usage. So if, for example, the 7 Commission were to not allow the Company to recover 8 its costs so that its return was less than what's a 9 fair and reasonable return, then its bond ratings, 10 I believe, would be affected and affected 11 negatively. And so who would -- who would determine the fair 12 **Q**. 13 and reasonable? Is that your -- your decision or 14 your analysis? 15 Α. Oh, obviously, we all as parties have an opinion as 16 to what that is. Ultimately, it's the Commission 17 who will decide. And the bond community and the 18 investment community will make their decision also whether they -- they believe that is fair and 19 20 reasonable.

Q. And so if -- if the -- if Duke Energy's bond ratings are improved because the Company has an ambitious energy efficiency program is that an economic benefit to the Company?

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114 E-7, Sub 831 - Volume 1 1 Α. Yes. 2 Is -- under the Settlement Agreement is that 0. 3 economic benefit a part of the net lost revenues? Α. No, because the -- basically, the Company is -- no, 4 5 it is not. 6 Now, in Mr. Colton's testimony he also talked of 0. 7 some other benefits to the Company such as lower 8 bad debt write-off. Would that be a benefit to a 9 Company if they didn't have to write off as many bad debts? 10 11 Α. Yes, it would if -- if there is such a thing and if 12 one is -- yes, it would be. 13 Ο. Reduced carrying costs on arrearages? 14 Α. If arrearages should happen to change because of 15 the energy efficiency demand-side management 16 programs. If that were to occur, then that would 17 be a benefit. I believe it would probably be 18 fairly minuscule, but I don't know that. 19 Q. Now, are those things that you would suggest to --20 to Duke that they -- that they look at as part of 21 the -- the cost of their energy efficiency 22 programs? 23 Α. I believe that's probably getting out of the bounds 24 of those items to be looked at as part of this

115 E-7, Sub 831 - Volume 1 proceeding. Now, obviously, I'll say that -- that 1 to the extent that those costs are reduced, then 2 customers will ultimately benefit by that reduction 3 through -- in a rate case that might -- might occur 4 in the future. That could happen. Not could 5 6 happen; it will happen. 7 MR. RUNKLE: I have no further questions. 8 CHAIRMAN FINLEY: Other questions on cross? 9 10 MR. HOLTZMAN: No questions. No, sir. 11 MS. THOMPSON: Nothing. 12 MR. OLSON: No questions. MR. MCDONALD: No. 13 CHAIRMAN FINLEY: Redirect? 14 15 MS. HEIGEL: I have just a few questions. REDIRECT EXAMINATION BY MS. HEIGEL: 16 17 **Q**. Mr. Farmer, are the earnings caps that Mr. Green was referring to earlier, are those guarantees of 18 19 certain levels of earnings for the Company? 20 Α. The Company has made it pretty clear No. 21 throughout in its testimony that these are caps 22 only -- these cap the Company's earnings. To the 23 extent that the Company earns less than that, then that's the Company's issue, basically. And in 24

116E-7, Sub 831 - Volume 1 fact, the example that we went through with Mr. 1 Green which showed that -- his lost revenue example 2 as we were going through that, that example showed 3 4 that the -- based on the numbers -- the Company's 5 estimate of cost and revenues, the actual return earned would be 11.1 percent and not the 12 percent 6 7 that's provided for in the agreement. So that's the long answer. 8 9 The short answer is if we exceed the cap, 10 we'll give monies back to customers. If we are 11 under the cap, that will be our problem. There is 12 no provision that we could recover additional costs from customers. 13 14 And Mr. Farmer, do customers pay for advertising to Q. 15 build goodwill? 16 I don't believe they do in North Carolina. Α. That's 17 my impression. That's generally the rule 18 throughout most all utilities. I know, for 19 example, Indiana has that same rule, that that is. 20 not a cost that's recoverable from customers. Now, are the magnitude of investments in energy 21 Q. 22 efficiency equivalent to the investments in new 23 base load generation? 24 Α. Pardon me? Say that again, please?

117E-7, Sub 831 - Volume 1 1 Q. Are the magnitude of investments by the Company in 2 energy efficiency equivalent to investments in new base load generation? 3 Α. No, significantly less. 4 5 0. And can you elaborate on how nonutility benefits are captured in rate cases? 6 7 Nonutility -- you might need to help me with that. Α. Some of the things that Mr. Runkle was --8 ο. 9 Oh, okay. Α. Lower cost of --10 0. 11 Α. Yes. 12 -- debt and things of that nature? Q. 13 Α. Yeah. I think of nonutility as being something not 14 part of the utility operations. 15 0. Yeah, I should have been a little more explicit. No, it's -- now, I think I -- hopefully, I made it 16 Α. 17 clear that to the extent that some of these other 18 costs might change and might go down, that -- that 19 to the extent that that does happen, then that 20 would be reflected in determination of the revenue 21 requirement in a future rate case and that those --22 the benefits of those would be passed on directly 23 to the customers. 24 MS. HEIGEL: Thank you. I have nothing

	E-7, Sub 831 - Volume 1
1	further.
2	CHAIRMAN FINLEY: All right. We're going
3	to take a morning recess, and we'll be back at five
4	minutes until 11.
5	(RECESS TAKEN FROM 10:40 A.M. UNTIL 10:55 A.M.)
6	CHAIRMAN FINLEY: I believe we had
7	finished the redirect examination of Mr. Farmer,
8	and the next item would be questions by the
9	Commission. Mr. Culpepper.
10	COMMISSIONER CULPEPPER: Have you got a
11	copy of the August 10, 2009 filing entitled Duke
12	Energy Carolinas Responses to the Commission's Pre-
13	hearing Order Requiring Verified Information? Do
14	you have a copy of that?
15	THE WITNESS: I do.
16	COMMISSIONER CULPEPPER: Okay. Could you
17	flip over to there's an exhibit toward the back
18	of that called Attachment 8-1. It says it's two
19	pages, but I don't know. I want to take a look at
20	page 2 of 2, if you can get over there to that.
21	Tell me when you get there.
22	THE WITNESS: I have it.
23	COMMISSIONER CULPEPPER: All right. Do
24	you see the category the category there called
1	

119 E-7, Sub 831 - Volume 1 Total Avoided Costs and then there's residential 1 2 programs and then you get down to about five or six 3 or three or four or four or five. It says Total Residential Energy Efficiency Avoided Costs. 4 Fiftv -- I'm talking about year one now. It looks like 5 \$50,501,201. Do you see that? 6 7 THE WITNESS: Yes. COMMISSIONER CULPEPPER: 8 You see that 9 figure? 10 THE WITNESS: Yes, I do. 11 COMMISSIONER CULPEPPER: And then 12 underneath that is Power Manager. Now, I 13 understand that's the one residential DSM program. 14 Is that correct? 15 That's correct. THE WITNESS: 16 COMMISSIONER CULPEPPER: All right. And then you've got a figure right there something over 17 18 \$17 million. And then you've got Total Residential 19 Avoided Costs and there's a 67.9 figure there. You 20 see all that? 21 THE WITNESS: Yes. 22 COMMISSIONER CULPEPPER: Okay. Now, 23 setting that aside, can you turn over to your 24 Exhibit No. 3 that's attached to your testimony,

120 E-7, Sub 831 - Volume 1 1 Farmer Exhibit Number 3? It's entitled Estimated 2 Annual Riders Applicable to the Company's Energy 3 Efficiency Plan. Do you have that in front of you? 4 THE WITNESS: I do. 5 COMMISSIONER CULPEPPER: Okay. I just 6 want to zero in on year one, not the whole -- all 7 of it, just talking about year one. I'm trying to 8 get a handle on something. You've got a figure 9 there that says Residential Avoided Cost Revenue 10 Requirement, and it's \$17,780,486. Do you see that 11 figure? 12 THE WITNESS: Yes. 13 COMMISSIONER CULPEPPER: Now, am I 14 understanding correctly that that figure might not 15 be the correct figure that everybody agrees upon at 16 this point in time? 17 THE WITNESS: Are you assuming the 18 Commission will make adjustments to -- that might 19 affect this figure or --20 COMMISSIONER CULPEPPER: No, sir. I was 21 just wondering if the Public Staff agrees with that 22 -- with that particular figure. 23 THE WITNESS: They do not. 24 COMMISSIONER CULPEPPER: They do not?

	E-7, Sub 831 - Volume 1
1	Okay. So there's some disagreement about that
2	figure?
3	THE WITNESS: Yes.
4	COMMISSIONER CULPEPPER: All right. But
5	there is some figure that's eventually going to be
6	decided in this case for year one residential
7	avoided cost revenue requirement. Let me ask you
8	this. On this particular exhibit, does this
9	include both energy efficiency and the one DSM
10	program or is this strictly energy efficiency?
11	THE WITNESS: This is the combination of
12	both of the energy efficiency and the DSM.
13	COMMISSIONER CULPEPPER: All right.
14	Okay, good. All right. So here's what I want to
15	ask you. Looking at this figure over here, these
16	three figures in the attachment 8-1, page 2, we
17	talked about total residential energy efficiency
18	avoided cost, and there's a figure of a little over
19	\$50 million. And then there's the one DSM program,
20	and it's about 17.5 million. And the total is
21	67.9. Tell me how you get from those figures to
22	this 17.78 figure on your exhibit. What do you
23	multiply those figures by in order to get this
24	figure on your exhibit?

E-7, Sub 831 - Volume 1 THE WITNESS: I'll give you my best -- on 1 2 this. There may be -- you may have a need to 3 clarify this with Dr. Stevie, but I think I can answer your question. 4 5 COMMISSIONER CULPEPPER: Okav. THE WITNESS: First of all, the avoided 6 7 cost that you are looking at on the Attachment 8-1, which actually is a Dr. Stevie exhibit, I believe 8 9 that those are -- are just that. They are the 10 avoided costs by year. They have not been -- the percentages, the 75 percent and 50 percent, I don't 11 12 believe have been multiplied times these numbers, that being 75 percent of the demand-side management 13 14 avoided cost and 50 percent of the net present 15 value of the energy efficiency. So I don't believe 16 that that's taken place at this point. 17 And then also, obviously, the -- that --18 what would -- that resultant, then, has not been 19 allocated to -- between the North Carolina and the 20 South Carolina jurisdictions, so that would cause 21 this number on my exhibit to be lower than on Exhibit 8-1. And then the allocation to 22 23 residential and nonresidential customers has really not been factored into those numbers that are on 24

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	E-7, Sub 831 - Volume 1
1	Exhibit 8-1 although
2	COMMISSIONER CULPEPPER: Well, let me
3	stop you.
4	THE WITNESS: Although, you do have
5	the number as I yeah, we're looking at
6	residential numbers on 8-1 so that there is that
7	distinction is there. I misspoke on that.
8	COMMISSIONER CULPEPPER: All right.
9	Well, let me ask you this. Are you saying, then,
10	that these figures on Attachment 8-1 that we've
11	been talking about, that those are not just North
12	Carolina figures, that that's North Carolina and
13	South Carolina.
14	THE WITNESS: I believe that's the case,
15	yes.
16	COMMISSIONER CULPEPPER: All right. So -
17	- well, let me let me just ask you this for
18	purposes of getting straight in my mind about how
19	you would get to your your figure on your
20	exhibit, your 17.7. If if these figures on
21	Attachment 8-1, if they were strictly North
22	Carolina figures, do I understand it that you would
23	take that figure for the total residential energy
24	efficiency cost and multiply that time 50 percent,

E-7, Sub 831 - Volume 1

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that is 0.5, and then multiply that by 0.85 and
then take the power manager North Carolina figure
and multiply that time 0.75 and then multiply the
resultant figure by 0.85, add the two resulting
figures together, and that should be your figure
here, residential avoided cost revenue requirement
for year one? Is that right?

THE WITNESS: The only thing that I'm wondering about -- and I need Dr. Stevie to confirm what these numbers are. The values in years one, two, three, and four for the avoided cost for -for example, for energy efficiency, the \$50 million number that we saw in this table. I'm assuming that that is what it says it is, the avoided cost for that year. Now, of course, the revenue requirement for energy efficiency based on the Company's model is based on the net present value of the avoided costs that occur over the life of the measure.

COMMISSIONER CULPEPPER: Well, there's testimony that that -- the NPV factor isn't there for year one. Isn't that correct? That's a factor for year two, three, and four? You reduce --THE WITNESS: Well --

125 E-7, Sub 831 - Volume 1 COMMISSIONER CULPEPPER: 1 You reduce year 2 two's calculations by some discount factor. 3 THE WITNESS: Yeah, I think --4 COMMISSIONER CULPEPPER: It's beyond me, but it's there. 5 6 THE WITNESS: I think theoretically I 7 believe that's correct. And again, that's -- you 8 might want to confirm that with Dr. Stevie or Mr. 9 Smith could probably confirm that for you. But yes, in theory -- theoretically and conceptually, I 10 11 agree with what you're saying. 12 COMMISSIONER CULPEPPER: All right. 13 Thank you. Thank you. CHAIRMAN FINLEY: Mr. Farmer, I want to 14 15 call your attention to some of the answers to the 16 supplemental information provided by the Company on August 10, 2009, in particular Attachment 1 --17 18 excuse me, Attachment 3-1. Total costs. 19 THE WITNESS: Okay, I have it. CHAIRMAN FINLEY: Do you see that's 20 21 broken down into implementation and assessment 22 costs, administration costs, and in the lower 23 category there is incentives? Do you see the 24 headings on the top of the columns there?

126 E-7, Sub 831 - Volume 1 THE WITNESS: Yes. 1 2 CHAIRMAN FINLEY: I guess my question is 3 when we talk about incentives on that exhibit, are those incentives paid by Duke to consumers or is 4 that incentives that Duke earns on the program? 5 THE WITNESS: No, it -- it's not the 6 7 latter. I believe it is the -- the former. It's the incentives paid to the customer; not the, for 8 9 example, the 1512 or percent return. I believe 10 that to be the case. I'm pretty certain of that. 11 You might want to confirm that with Mr. Smith. CHAIRMAN FINLEY: All right. If you then 12 13 would turn back to the settlement exhibit itself on 14 page 23? Are you with me? 15 THE WITNESS: Yes, I have it. 16 CHAIRMAN FINLEY: There in paragraph 3 17 you have a table that's labeled Total Revenue 18 Requirements. Is that correct? 19 THE WITNESS: Yes. 20 CHAIRMAN FINLEY: I want to ask you about 21 the last set of lines and columns. Total revenue 22 requirement at 85 percent achievement. And the sum total of that is \$369.2 million. Correct? 23 24 THE WITNESS: Yes.

127 E-7, Sub 831 - Volume 1 CHAIRMAN FINLEY: And that is to be the 1 2 Company's determination of the full revenue 3 requirements during the four-year term of the plan with the exception of any outstanding balance of 4 5 net lost revenues to be collected by the Company or revenue credit to be refunded to customers, is it 6 7 not? 8 THE WITNESS: That's correct. 9 CHAIRMAN FINLEY: So the total revenue 10 requirement at 85 percent achievement of the \$369.2 11 million shown there is to -- is to recover the 12 program costs, net lost revenues, and the earnings 13 to the Company that result from the incentive 14 compensation. Right? THE WITNESS: That is correct. These --15 the -- the numbers here are all inclusive of those 16 17 three components that would be recovered through 18 the revenue requirement. 19 CHAIRMAN FINLEY: And if you turn to 20 revised Farmer Exhibit 1 which was, again, provided 21 in response to question 15 to the Commission's 22 requests -- are you there? 23 THE WITNESS: Yes. 24 CHAIRMAN FINLEY: And column G, Revised

128 E-7, Sub 831 - Volume 1 1 Farmer Exhibit No. 1, you show a total revenue 2 requirement there on line 5 --THE WITNESS: I'm sorry. I need to -- I 3 was not there. I misspoke, I quess. I didn't --4 didn't have the exhibit and the question. 5 Actually, I'm not sure if my data book has that 6 exhibit. 7 8 CHAIRMAN FINLEY: It's the last page on a 9 submission. (COUNSEL HANDS DOCUMENT TO WITNESS) 10 11 THE WITNESS: Okay. I have it. 12 CHAIRMAN FINLEY: If you will, look at 13 column G, line 5. 14 THE WITNESS: Okay, I have that. 15 CHAIRMAN FINLEY: The \$218.2 million? 16 THE WITNESS: Yes. 17 CHAIRMAN FINLEY: That shows a total 18 revenue requirement of \$218.2 million for the 19 four-year pilot program excluding the revenue 20 recovery related to net lost revenues. Correct? That's correct. 21 THE WITNESS: 22 CHAIRMAN FINLEY: And by our calculation 23 that agrees to the estimated revenues at 85 percent achievement shown on Exhibit B, paragraph H.3 on 24

129 E-7, Sub 831 - Volume 1 page 23. And this revenue requirement is designed 1 2 to recover the program costs and the earnings to 3 the Company that result from the incentive 4 compensation. Right? That's correct. THE WITNESS: 5 6 CHAIRMAN FINLEY: Okay. And if we look 7 back at the Smith exhibit, Exhibit 3-1 -- have you 8 made it back to attachment to 3-1?9 THE WITNESS: These are exhibits to Mr. 10 Smith's testimony? CHAIRMAN FINLEY: This is attachment 3-1 11 12 to the -- your answers to the Commission's 13 questions. We looked at this moment ago when I 14 asked you about the incentives. 15 THE WITNESS: Okay. 16 CHAIRMAN FINLEY: At the bottom there, 17 the last line, you have the totals for years one, 18 two, three, and four. Right? 19 THE WITNESS: Yes. 20 CHAIRMAN FINLEY: And if you add those 21 up, the 35.4 million, the 45.8, the 79.0, the 114.7 22 -- that adds up to be 275 million. Right? Would 23 you accept that? THE WITNESS: I'll accept that, yes. 24

130E-7, Sub 831 - Volume 1 1 CHAIRMAN FINLEY: If you would please 2 explain how the \$218.2 million that we were looking 3 at over on attachment 15-1 is designed to recover 4 the Company's projected program costs of 275 5 million as provided on attachment 3-1. In other 6 words, does that total revenue requirement indeed 7 recover all of those costs? THE WITNESS: It --8 9 CHAIRMAN FINLEY: -- and the incentives and the net lost revenues? 10 11 THE WITNESS: Yeah, I think this is a 12 question for Mr. Smith. Now, I will say I think 13 what may be happening here is that the -- the 14 numbers on attachment 3-1 are -- I believe are both 15 North Carolina and South Carolina numbers. They 16 are the cost to administer the program in both 17 jurisdictions, where the revenue requirement on --18 on my exhibit is after the allocation to the 19 jurisdictions and the allocation to residential and 20 nonresidential. I -- I believe that's certainly 21 one item that might contribute to these 22 differences. And again, I -- I suggest you ask Mr. 23 Smith. 24 Very well. Mr. Smith CHAIRMAN FINLEY:

131 E-7, Sub 831 - Volume 1 1 is back there I hope and --MS. NICHOLS: He'll be next. 2 CHAIRMAN FINLEY: He'll be next. A11 3 4 right. If you would look on page 4, lines 15 and 18 of your June 19, 2009 testimony, please? 5 THE WITNESS: Was that line 4, page 19? 6 7 CHAIRMAN FINLEY: No, no. Page 4, lines 15 and 18. 8 9 THE WITNESS: Okay. I wasn't even close. 10 Page 4, lines -- I have it. 11 CHAIRMAN FINLEY: You state there that Farmer Supplemental Exhibit No. 1 shows that the 12 13 sum of the jurisdictional revenue requirement based on the terms and provisions of the agreement is 14 15 \$27.4 million, 8 percent less than the Company's 16 original filing over the four-year recovery period. Right? 17 18 THE WITNESS: Yes. CHAIRMAN FINLEY: And if you turn back to 19 20 that page Ms. Nichol gave you a moment ago, there 21 is a footnote 2 in very small print down at the 22 bottom of the page. You see that? 23 THE WITNESS: Yes. 24 This states in part CHAIRMAN FINLEY:

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1	that the Company estimates that the combined sum of
2	net lost revenues subject to recovery by North
3	Carolina customers in year five and six will total
4	approximately \$54 million at 85 percent of targeted
5	achievement results. And the question is if you
6	were to include the 54 million of projected net
7	lost revenue recovery referenced in footnote 2 and
8	your comparison on exhibit 15-1, is it not true
9	that the sum of the jurisdictional revenue
10	requirement based on the terms and provisions of
11	the Settlement Agreement are greater than the
12	Company's original filed save-a-watt proposal by
13	approximately \$27 million? And if not, could you
14	explain why?
15	THE WITNESS: That is a true statement.
16	And, you know, as I as this testimony was put
17	together I I certainly did not want to mislead
18	anyone on on this issue. In fact, my testimony
19	a couple of times points out, hopefully clearly,
20	that beyond the initial four-year period that there
21	would be an additional recovery of net lost
22	revenues for years five and six so that so that
23	the total revenue, like like you say, is the
24	same or is greater than under the Company's

133E-7, Sub 831 - Volume 1 original proposal during the six -- that six-year 1 2 period. Well, no. Actually, that's not the case. 3 This became kind of a difficult thing to 4 -- to show. And that's because under the original -- the Company's original proposal the revenue 5 6 requirement extended out a number of years. For 7 example, up to 18 years or so. And now we have -under the Settlement Agreement we have a -- a plan 8 9 that recovers revenues over a relatively short 10 period of time, a four-year period with an 11 additional two years for net lost revenue recovery. 12 So, you know, to -- to make a really 13 valid comparison of the settlement -- revenue under 14 Settlement Agreement versus the original SAW 15 proposal you would have to take all of that into 16 consideration, the revenue over the entire length 17 of the period. So it becomes very confusing, 18 especially to put that in written word in 19 testimony. So I want to be very clear that -- that 20 what this comparison is is over the initial four-21 year period the revenue that would be collected is less when compared to those numbers that was in the 22 23 Company's original proposal. 24 However, yes, there are additional

134 E-7, Sub 831 - Volume 1 revenues in the fifth and sixth years. And if you 1 2 take those into consideration then the numbers that 3 you have are correct. And if you wanted to really 4 get to -- I'm going on further than I need to, but 5 if you really want to compare the revenues on these -- the requirement of these two plans you'd also 6 have to take into consideration the revenues beyond 7 years four and beyond year six. And so, you know, 8 you slice and dice it a number of different ways so 9 10 Thank you. 11 CHAIRMAN FINLEY: That's --12 anybody else -- any other Commissioner have 13 questions? 14 (No response.) 15 CHAIRMAN FINLEY: Okay. Any questions on 16 the Commission's questions? 17 MS. HEIGEL: No, Mr. Chairman. At this 18 time I would move Mr. Farmer's Exhibits 1 through 4 into the record. 19 20 CHAIRMAN FINLEY: Farmers Exhibits 1 21 through 4 are admitted into evidence. MR. GREEN: Mr. Chairman, I will move the 22 23 Attorney General's Farmer Exhibit Number 1 into 24 evidence.

135 E-7, Sub 831 - Volume 1 CHAIRMAN FINLEY: Attorney General's 1 Farmer Cross Examination Exhibit No. 1 is entered 2 into evidence. 3 (FARMER DIRECT EXHIBITS 1 THROUGH 4 AND 4 5 AND ATTORNEY GENERAL'S FARMER CROSS EXAMINATION 6 EXHIBIT NO. 1 WERE ADMITTED INTO EVIDENCE.) 7 CHAIRMAN FINLEY: All right. Duke? 8 THE WITNESS: Thank you, Mr. Chairman and 9 members of the Commission. CHAIRMAN FINLEY: Thank you, Mr. Farmer. 10 11 MS. NICHOLS: At this time we call Mr. 12 Raiford Smith. 13 CHAIRMAN FINLEY: Mr. Smith, come around. 14 MS. NICHOLS: We are going to put up Mr. 15 Smith for purposes of his MIRR testimony that was 16 requested -- the calculation that was requested by 17 the Commission, and then we will call him back up 18 after Mr. Colton testifies for his rebuttal 19 testimony. 20 CHAIRMAN FINLEY: Very well. 21 (WHEREUPON, RAIFORD L. SMITH WAS CALLED AS A 22 WITNESS, DULY SWORN, AND TESTIFIED AS FOLLOWS:) DIRECT EXAMINATION BY MS. NICHOLS: 23 24 Mr. Smith, please state your full name and business 0.

136 E-7, Sub 831 - Volume 1 address. 1 2 Α. My name is Raiford Lawrence Smith, and my address 3 is 526 South Church Street, Charlotte, North Carolina 28202. 4 5 By whom are you employed and in what capacity? Q. 6 Α. I'm employed by Duke Energy, and I am director of 7 strategy and collaboration for the marketing and energy efficiency group. 8 9 Did you cause to be prefiled in this docket Q. 10 testimony consisting of 12 -- settlement supporting 11 testimony consisting of six pages plus Smith 12 Exhibit No. 1 consisting of six pages? I did. 13 Α. 14 Do you have any changes or corrections to your Q. 15 settlement testimony or its exhibit? 16 Α. I do not. 17 MS. NICHOLS: At this time we move that 18 the prefiled settlement testimony of Mr. Smith be 19 copied into the record as if given orally from the 20 stand and that his exhibit be marked as prefiled. 21 CHAIRMAN FINLEY: Mr. Smith's direct prefiled testimony shall be copied into the record 22 23 as though given orally from the stand, and his exhibit shall be marked as premarked in the file. 24

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1	(THE PREFILED SETTLEMENT TESTIMONY OF
2	RAIFORD L. SMITH WILL BE COPIED INTO THE
3	RECORD AS IF GIVEN ORALLY FROM THE
4	WITNESS STAND, AND SMITH EXHIBIT NO. 1
5	WAS MARKED FOR IDENTIFICATION.)

### I. INTRODUCTION AND PURPOSE

## Q. PLEASE STATE YOUR NAME, ADDRESS, AND POSITION WITH DUKE 2 ENERGY BUSINESS SERVICES, LLC.

A. My name is Raiford L. Smith, and my business address is 526 South Church Street,
Charlotte, North Carolina. I am Director, Strategy and Collaboration for Duke
Energy Business Services, LLC, a service company affiliate of Duke Energy
Carolinas, LLC ("Duke Energy Carolinas" or the "Company") and am responsible for
leading collaborative efforts on new product development and energy efficiency
across all retail markets served by Duke Energy Corporation ("Duke Energy"),
including Duke Energy Carolinas' service territory.

# 10Q.PLEASE STATE BRIEFLY YOUR EDUCATION AND BUSINESS11BACKGROUND AND EXPERIENCE.

A. I earned a Bachelor of Science degree in Computer Science from the University of
 Georgia in Athens, Georgia in 1995. I also have earned a Masters of Business
 Administration from the University of Virginia's Darden Graduate School of Business
 Administration in Charlottesville, Virginia in 2002. I am currently pursuing a Juris
 Doctor degree from the Charlotte School of Law in Charlotte, North Carolina.

In addition to my current role with Duke Energy, I am also currently the vice
chairman of the Southeastern Energy Efficiency Alliance and a member of the board
for the Midwestern Energy Efficiency Alliance. I am a recipient of the 2006
Southeastern Electric Exchange Industry Excellence Award in the category of rates
and regulation and earned my Six Sigma Green Belt certification in 2006.

Settlement Testimony: RAIFORD L. SMITH Duke Energy Carolinas, L.L.C NCUC Docket No. E-7, Sub 831

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I also have seventeen years of experience in the energy industry. During that 1 time, I have served in various roles in both the regulated retail and unregulated 2 wholesale electric and natural gas businesses with The Southern Company, Mirant, 3 and Duke Energy. My experience includes energy efficiency, pricing and rates, 4 product development, customer management, wholesale deal structuring, mergers and 5 6 acquisitions, and technology. Prior to my current position, I held several other 7 positions at Duke Energy, including Director of Marketing Operations, Director of Product Development, and Manager of Energy Efficiency Products for the Marketing 8 9 and Energy Efficiency organization.

#### 10 Q. WHAT IS THE PURPOSE OF YOUR SETTLEMENT TESTIMONY?

A. The purpose of my testimony is to sponsor the modified internal rate of return
("MIRR") analysis on the Joint Agreement and Stipulation filed by the Public Staff,
the Environmental Intervenors, and Duke Energy Carolinas on June 12, 2009 (the
"Settlement Agreement"). This analysis was requested by the Commission in its
Order Scheduling Hearing to Consider "Agreement and Joint Stipulation of
Settlement," dated June 18, 2009.

### II. MODIFIED INTERNAL RATE OF RETURN

#### 17 Q. HAVE YOU PREPARED ANY EXHIBITS?

18 A. Yes, I have. Attached to my testimony as Smith Exhibit No. 1 is an MIRR analysis of
 19 the Company's energy efficiency and demand-side management portfolio at 100%
 20 achievement. This exhibit (1) details revenues and costs to the program level, and (2)
 21 shows nominal revenues and expenses on both a system level and North Carolina-

Settlement Testimony: RAIFORD L. SMITH Duke Energy Carolinas, LLC NCUC Docket No. E-7, Sub 831

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# only basis. The revenues allocated to North Carolina use the same allocation methodology the Company proposed in the Settlement Agreement.

# 3 Q. PLEASE SUMMARIZE THE MIRR ANALYSIS SET FORTH IN SMITH 4 EXHIBIT NO. 1.

A. The MIRR analysis compares cash inflows to the Company versus costs the Company
would incur. Revenues (cash inflows) are comprised of both avoided cost-based
revenues and net lost revenue recovery. Expenses include both program costs and
net lost revenues. Based on this analysis, the Company's overall MIRR is calculated
to be 6.1%.

10 All revenues and expenses included in the MIRR analysis assume the 11 Company will achieve 100% of its avoided cost targets. However, if the Company 12 fails to attain 100% of its avoided cost targets, the Company's revenues would be 13 reduced in accordance with the Settlement Agreement. This revenue reduction would 14 limit the Company's earnings opportunity, reduce the portfolio's after-tax return on 15 investment below 15%, and lower the MIRR of the portfolio.

16 Q. HOW DOES THE MIRR ANALYSIS OF THE SETTLEMENT COMPARE TO

## 17 THE MIRR ANALYSIS FILED BY THE COMPANY ON MARCH 31, 2009?

A. The Company has used the same format and methodology for calculating expenses in
 this analysis as it did in the March 31<sup>st</sup> filing. In that filing, the Company included
 several MIRR calculations using a variety of revenue requirement calculations,
 including save-a-watt as originally filed, a modified version of save-a-watt, and the
 Progress Energy Carolinas methodology. Those methods yielded overall MIRR's of
 7.1%, 6.4%, and 6.0%, respectively, compared to the 6.1% return produced by the

settlement methodology at 100% achievement. The settlement proposes the same compensation mechanism as the modified save-a-watt proposal shown in Scenario I of the March 31<sup>st</sup> filing, with two major changes: (1) energy efficiency revenues were lowered from 55% to 50% of avoided costs, and (2) the energy efficiency portfolio was scaled up to achieve higher impacts. These changes led to an MIRR reduction of 141

THE

**Q**. 7 USEFUL IS THE MIRR A METRIC IN DETERMINING 8 PROFITABILITY THE COMPANY'S PROPOSED ENERGY OF **EFFICIENCY PLAN?** 9

roughly 30 basis points.

10 Α. The MIRR is a well-recognized financial metric for capital budgeting that is used to 11 compare a company's cost of capital to the return from an investment in an asset. 12 However, for determining the profitability of the Company's modified save-a-watt 13 incentive mechanism proposed in the Settlement Agreement, MIRR has a notable 14 limitation based on how cash flows are recognized. In order for the MIRR 15 calculation to provide a meaningful result, it requires that the project begin with an 16 investment (recognized as a cash outflow) followed by positive cash inflows for the 17 remaining life of the project. Traditional capital-based investments follow this 18 structure because they incur costs while the asset is under construction. Once the - 19 asset has been constructed, the Company then receives positive cash inflows for the 20 remainder of the life of the asset to recover the asset's capital costs.

21 However, revenues and expenses for energy efficiency and demand-side 22 management investments do not fit the paradigm of a traditional capital investment. 23 Instead, revenues and certain program expenses for energy efficiency and demand-

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side management occur within the same year. Additionally, energy efficiency creates 1 2 ongoing expenses in the form of net lost revenues. Thus, in order to calculate an MIRR with the appropriate cash inflows and outflows, net lost revenues and program 3 expenses from energy efficiency were recognized on a net present value basis in the 4 first year even though they actually occur over the life of the programs. As a result, 5 6 the MIRR calculation is less meaningful for financial comparisons because the cash 7 flows from the energy efficiency investment have been re-structured to fit the MIRR 8 calculation. Instead, the Company believes a return on investment calculation is more 9 appropriate because it does not require cash flows to be restructured. Accordingly, 10 the Settlement Agreement proposes to set the Company's earnings cap on a return on 11 investment basis.

12 III. <u>CONCLUSION</u>

13 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

14 A. Yes, it does.

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1	Q.	Do you have a summary of your settlement testimony,
2		Mr. Smith?
3	А.	I do.
4	Q.	Please give that settle please give that summary
5		to the Commission.
6		(THE SUMMARY OF THE PREFILED SETTLEMENT TESTIMONY
7		OF RAIFORD L. SMITH WILL BE COPIED INTO THE RECORD
8		AS GIVEN ORALLY FROM THE WITNESS STAND.)
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### DUKE ENERGY CAROLINAS, LLC Docket No. E-7, Sub 831 SUMMARY OF MIRR TESTIMONY OF RAIFORD L. SMITH

1 The purpose of my testimony is to sponsor the modified internal rate of return, or 2 MIRR, analysis, on the Joint Agreement and Stipulation filed by the Public Staff, the 3 <sup>4</sup> Environmental Intervenors, and Duke Energy Carolinas on June 12, 2009.

The MIRR analysis in the exhibit attached to my pre-filed testimony compares cash inflows to the Company versus costs the Company would incur. The exhibit uses the same format and methodology for calculating expenses in this analysis as it did in the March 31<sup>st</sup> filing. Based on this analysis, the Company's overall MIRR is calculated to be 6.1%.

8 The settlement proposes the same compensation mechanism as the modified save-a-9 watt proposal shown in Scenario I of the March 31<sup>st</sup> filing, with two major changes: First, 10 energy efficiency revenues were lowered from 55% to 50% of avoided costs. Second, the 11 energy efficiency portfolio was scaled up to achieve higher impacts. These changes led to an 12 MIRR reduction of roughly 30 basis points.

All revenues and expenses included in the MIRR analysis assume the Company will achieve 100% of its avoided cost targets. However, if the Company fails to attain 100% of its avoided cost targets, the Company's revenues would be reduced in accordance with the Settlement Agreement. This revenue reduction would limit the Company's earnings opportunity, reduce the portfolio's after-tax return on investment below 15%, and lower the MIRR of the portfolio.

The MIRR is a well-recognized financial metric for capital budgeting. For
 determining the profitability of the Company's modified save-a-watt incentive mechanism

1 proposed in the Settlement Agreement, however, MIRR has a notable limitation based on 2 how cash flows are recognized. Revenues and expenses for energy efficiency and demand-3 side management investments do not fit the paradigm of a traditional capital investment. 4 Instead, revenues and certain program expenses for energy efficiency and demand-side 5 management occur within the same year. Additionally, energy efficiency creates ongoing 6 expenses in the form of net lost revenues. Thus, in order to calculate an MIRR with the 7 appropriate cash inflows and outflows, net lost revenues and program expenses from energy 8 efficiency were recognized on a net present value basis in the first year even though they 9 actually occur over the life of the programs. As a result, the MIRR calculation is less 10 meaningful for financial comparisons because the cash flows from the energy efficiency 11 investment have been re-structured to fit the MIRR calculation. Instead, the Company 12 believes a return on investment calculation is more appropriate because it does not require 13 cash flows to be restructured. Accordingly, the Settlement Agreement proposes to set the 14 Company's carnings cap on a return on investment basis.

15 Th

This concludes the summary of my MIRR Testimony.

146 E-7, Sub 831 - Volume 1 1 MS. NICHOLS: Mr. Smith is available for cross examination. 2 MR. GREEN: No questions for me. 3 MR. RUNKLE: No, sir. 4 5 MR. HOLTZMAN: No, sir. 6 MS. THOMPSON: No questions. 7 MR. OLSON: I have no questions. 8 CHAIRMAN FINLEY: Congratulations, Mr. 9 Smith. You get a pass at least for now. 10 THE WITNESS: Thank you, sir. MS. NICHOLS: Chairman, would you like to 11 12 ask Mr. Smith the questions that you were talking 13 to Mr. Farmer about in terms of the differences? 14 CHAIRMAN FINLEY: Right. And I failed to 15 allow other commissioners to ask questions. 16 Anybody else have a question of Mr. Smith? 17 (No response.) 18 CHAIRMAN FINLEY: Good assumption on my 19 part. Mr. Smith, did you hear the questions that 20 we asked of Mr. Farmer? I'll be happy to try to 21 repeat them. 22 I would appreciate it if THE WITNESS: 23 you could repeat them so I could look at the exact 24 exhibits.

E-7, Sub 831 - Volume 1 CHAIRMAN FINLEY: If I'm able. 1 Let me 2 see here. If you will turn to page 23 of the 3 settlement -- the settlement exhibit, Schultz Settlement Exhibit No. 1? 4 5 THE WITNESS: Yes, sir. I'm there. 6 CHAIRMAN FINLEY: All right. Do you see 7 the number on the far right-hand corner at the bottom of -- sum total of \$369.2 million? 8 9 THE WITNESS: Yes, I do. 10 CHAIRMAN FINLEY: All right. That's the 11 full revenue requirements during the four-year plan 12 with the exception of an outstanding balance of net 13 lost revenues to be collected by the Company or 14 revenue credit to be refunded to customers. Is it 15 not? THE WITNESS: 16 That is correct. 17 CHAIRMAN FINLEY: All right. And if we 18 turn to the last page of the supplemental 19 information provided by the Company that is 20 encaptioned Attachment 15-1? That's the response 21 to question 15? 22 THE WITNESS: Yes, I'm there. 23 CHAIRMAN FINLEY: Do you see the number 24 on column G, line 5, of \$218.2 million?

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148 E-7, Sub 831 - Volume 1 THE WITNESS: Yes, I do. 1 CHAIRMAN FINLEY: That is the total 2 3 revenue requirement for the four-year pilot program excluding revenue recovery related to net lost 4 5 revenues, correct? 6 THE WITNESS: Yes, that is correct. 7 CHAIRMAN FINLEY: And if you look at attachment 3-1 of the supplemental information 8 9 having to do with the program costs? 10 THE WITNESS: Yes. 11 CHAIRMAN FINLEY: At the bottom there, 12 the total is 35.4 million, 45.8 million, 79 13 million, \$114.7 million. Those add up to be \$275 14 million in total program costs. Correct? 15 THE WITNESS: They do add to that sum, 16 yes. CHAIRMAN FINLEY: 17 And the question is can 18 you please explain how the \$218.2 million of 19 revenue requirement as shown on column G of 20 attachment 15-A is designed to recover the 21 Company's projected program costs of \$275 million 22 as provided on attachment 3-1? 23 THE WITNESS: Yes, sir. There are two 24 notable differences to talk about here that are

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1	shown in attachment 3-1. The first is the expenses
2	shown in 3.1 represent the Company's projections
3	for both North and South Carolina. The second
4	difference is the revenue requirements shown both
5	in attachment 15-1 and in the Company's exhibit in
6	the settlement document represent recovery at 85
7	percent of achievement. If you look at those
8	differences, the revenue requirements are meant to
9	recover those expenses over that time period, but
10	you would need to change what's shown in exhibit 3-
11	l to reflect just North Carolina's expenses.
12	CHAIRMAN FINLEY: Very well. Thank you
13	very much. That clarifies that. Appreciate it.
14	Are there questions on the commission's questions?
15	MS. NICHOLS: There was also an earlier
16	question by Commissioner Culpepper of Mr. Farmer
17	related to how the avoided costs set forth in
18	attachment 8-1 are translated into the revenue
19	requirements on Farmer Exhibit 3. And I thought
20	perhaps Mr. Smith could also verify that response
21	as well.
22	THE WITNESS: Would you mind repeating
23	the question to make sure I'm looking at the right
24	things?

150 E-7, Sub 831 - Volume 1 1 MS. NICHOLS: Well, I didn't want to make more work for the Commissioner. 2 THE WITNESS: Sorry. Yeah, so I guess --3 4 MS. NICHOLS: Let me -- let me try to do 5 that for you. COMMISSIONER CULPEPPER: 6 No, that's all 7 right. It's okay. Well, I was talking about this 8 document that's labeled attachment 8-1. You got --9 THE WITNESS: Yes, sir. 10 COMMISSIONER CULPEPPER: -- your hands on that? 11 12 THE WITNESS: Yes, sir. 13 COMMISSIONER CULPEPPER: And on page 2 of this document -- and I was kind of trying to relate 14 15 that to Farmer Exhibit No. 3. I don't know if 16 you've got that in front of you or not. Do you? 17 THE WITNESS: One moment. Yes, sir. I 18 do. 19 COMMISSIONER CULPEPPER: Okay. And I 20 guess the question is with respect to attachment 8-21 1, page 2 of 2, the figures there toward the middle 22 of the page under -- the caption is Total 23 Residential Energy Efficiency Avoided Costs. Year 24 one, \$50.5 million. Then Power Manager year one,

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1	the figure is 17.4 for a total residential avoided
2	costs of \$67.9 million. Are those North Carolina
3	and South Carolina figures or just North Carolina
4	figures?
5	THE WITNESS: They represent the nominal
6	sum of that vintage each vintage's total avoided
7	costs for both North and South Carolina.
8	COMMISSIONER CULPEPPER: Well, let me ask
9	you this. This is a proceeding here in North
10	Carolina. Why why would you all file an exhibit
11	here that's got both North Carolina and South
12	Carolina figures on it? I mean, what how is
13	that going to make any sense to us deciding this
14	case?
15	THE WITNESS: Yeah, that's a fair
16	criticism. I think in the future we should just
17	file the North Carolina only specific information
18	so that it's more clear.
19	COMMISSIONER CULPEPPER: All right.
20	Well, let me ask you this. You heard my line of
21	questioning when I was talking with Mr. Farmer
22	about it, and I want to ask you the same thing.
23	Let's just say for purposes of you and me talking,
24	that these figures here on page 2, attachment 8-1,

152 E-7, Sub 831 - Volume 1 were just North Carolina figures. 1 2 THE WITNESS: Yes, sir. COMMISSIONER CULPEPPER: What would I do 3 4 to those figures that I just talked to you about to 5 get to this figure under year one on Farmer Exhibit 6 No. 1? THE WITNESS: Yes, sir. You -- you 7 8 couldn't exactly get there from here because they 9 represent the nominal sum of the vintage of avoided 10 costs. Stevie Exhibit 2 actually might be more 11 appropriate for that. What you would do for 12 conservation programs is you would take the net 13 present value of the avoided costs over their life 14 for that particular vintage, multiply it by 55 or, 15 excuse me, 50 percent, and that should get you to 16 the 100 percent revenue requirement number shown. 17 COMMISSIONER CULPEPPER: Then you 18 multiply that times 0.85 and you should have a 19 figure shown up there? 20 THE WITNESS: Yes, sir. 21 COMMISSIONER CULPEPPER: All right. So 22 basically, it's multiplying the 0.5 and then the 23 0.85 and reducing something down to a net present 24 value. Is that it?

153 E-7, Sub 831 - Volume 1 1 THE WITNESS: Yes, sir. 2 COMMISSIONER CULPEPPER: All right. 3 Thank you. CHAIRMAN FINLEY: Are there questions on 4 5 the Commission's questions? MS. NICHOLS: Nothing for Duke. 6 7 CHAIRMAN FINLEY: Very well. Thank you, 8 Mr. Smith. We will see you later. 9 MS. NICHOLS: That concludes Duke's 10 direct case. 11 CHAIRMAN FINLEY: All right. Who's next? MS. FENTRESS: The Public Staff will call 12 13 James McLawhorn. 14 CHAIRMAN FINLEY: Very well. 15 (WHEREUPON, JAMES S. MCLAWHORN WAS CALLED AS A WITNESS, DULY SWORN, AND TESTIFIED AS FOLLOWS:) 16 DIRECT EXAMINATION BY MS. FENTRESS: 17 18 0. Good morning, Mr. McLawhorn. If it's all right with 19 the Commission, I'll proceed. 20 Α. Good morning. 21 Ο. Could you please state your name, address, and 22 present position for the record? 23 Α. Yes, my name is James S. McLawhorn. My business 24 address is 430 North Salisbury Street, Raleigh,

154 E-7, Sub 831 - Volume 1 North Carolina. And I am the director of the 1 Electric Division of the Public Staff. 2 3 Q. And Mr. McLawhorn, did you prepare and cause to be 4 filed in this docket prefiled testimony on June 19, 5 2009 consisting of 14 pages and one appendix? Yes, I did. 6 Α. 7 Do you have any corrections to your testimony? 0. 8 Α. No, I do not. 9 If you were asked those same questions today would Q. 10 your answers be the same? Α. Yes, they would. 11 12 MS. FENTRESS: I would request that the 13 prefiled testimony be copied into the record as filed. 14 15 CHAIRMAN FINLEY: Mr. McLawhorn's 16 prefiled testimony shall be copied into the record 17 as though given orally from the stand. (THE PREFILED TESTIMONY OF JAMES S. MCLAWHORN WILL 18 BE COPIED INTO THE RECORD AS IF GIVEN ORALLY FROM 19 20 THE WITNESS STAND.)

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#### DUKE ENERGY CAROLINAS, LLC, DOCKET NO. E-7, SUB 831 N.C. Utilities Commission TESTIMONY OF JAMES S. MCLAWHORN ON BEHALF OF THE PUBLIC STAFF NORTH CAROLINA UTILITIES COMMISSION

#### June 19, 2009

### 1 Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND PRESENT 2 POSITION.

A. My name is James S. McLawhorn. My business address is 430 North Salisbury
Street, Raleigh, North Carolina. 1 am Director of the Electric Division of the
Public Staff of the North Carolina Utilities Commission (Public Staff), which is
representing the using and consuming public in this proceeding.

7

### 8 Q. HOW LONG HAVE YOU BEEN EMPLOYED BY THE PUBLIC STAFF?

- 9 A. I have been employed by the Public Staff since November 1988. I have been
  10 Director of the Electric Division since October 2006.
- 11

### 12 Q. WHAT ARE YOUR DUTIES?

A. I am responsible for providing supervision over the Electric Division and making
 policy recommendations in all electric utility matters pending before the
 Commission.

16

### 17 Q. PLEASE DISCUSS YOUR EDUCATION AND EXPERIENCE.

18 A. A summary of my education and experience is attached to my testimony as
19 Appendix A.

### 1 Q. HAVE YOU PREVIOUSLY BEEN INVOLVED IN THE SAVE-A-WATT 2 PROCEEDING?

A. In my role as Director of the Electric Division of the Public Staff, I have been
involved in the review and analysis of the save-a-watt proposal since it was filed
in May 2007 by Duke Energy Carolinas, LLC (Duke or the Company).

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### 7 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

8 Α. On June 12, 2009, Duke, the Southern Environmental Law Center, the 9 Environmental Defense Fund, the Natural Resources Defense Council, and the Southern Alliance for Clean Energy (collectively, the Environmental Intervenors). 10 11 and the Public Staff filed with the Commission an Agreement and Joint 12 Stipulation of Settlement (Settlement Agreement), which included Exhibit A 13 (procedural history), Exhibit B (the settlement terms), and Exhibit C (the list of 14 issues addressed). The purpose of my testimony is to address key components 15 of this Settlement Agreement and describe specific benefits achieved by it and highlighted by Exhibit C. The key components that my testimony addresses 16 17 include the following: (1) the Settlement Agreement as a pilot program of limited 18 duration: (2) the Settlement Agreement's provisions for the limited recovery of 19 incentive amounts, including net lost revenues, by the Company; (3) the 20 Settlement Agreement's provision of a more transparent cost and incentive 21 recovery than the save-a-watt model as initially filed; and (4) the Settlement 22 Agreement's protection of ratepayers from the risks of tying revenue recovery for



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energy efficiency and demand-side management (DSM) programs to future avoided supply-side costs.

LIMITED COST RECOVERY PERIOD

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# 6 Q. PLEASE BRIEFLY DESCRIBE THE PUBLIC STAFF'S CONCERNS WITH THE 7 INITIAL SAVE-A-WATT MODEL'S COST RECOVERY PERIOD, INCLUDING 8 LOST REVENUE COLLECTION.

9 A. The Public Staff was concerned that the initial save-a-watt model potentially
10 would have resulted in the Company earning an excessive incentive to
11 implement DSM and energy efficiency programs for an indefinite period with
12 limited opportunity for review and modification by the Commission.

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## 14 Q. PLEASE DISCUSS HOW THE SETTLEMENT AGREEMENT ADDRESSES 15 THIS CONCERN?

A. The Settlement Agreement has a term of four years, and it is a pilot program. At
the conclusion of four-year period, actual avoided costs savings will be compared
to the targeted avoided costs savings in a true-up proceeding. This limited
duration of the terms and conditions of this Settlement Agreement is similar to
the Public Staff's earlier recommendations in this proceeding. In the Public
Staff's proposed cost and incentive mechanism, presented in the testimony of its
witness, Richard F, Spellman, the Public Staff recommended a regulatory review



of incentive amounts after a period of three years to ensure that the incentive amounts remained appropriate. Furthermore, the Public Staff also recommended in that same proposal that net lost revenues be recovered for three years after a measure was installed. This Settlement Agreement contains comparable time limits. These terms limit the exposure of the parties to unintended consequences that can result from a novel regulatory approach.

8 In addition, with regard to net lost revenues, the Settlement Agreement 9 recognizes the Public Staff's view that revenues that are "lost" due to an energy efficiency program do not continue in perpetuity, but are offset in time by revenue 10 11 gains, resulting, for example, from customer growth or other increases in 12 demand. Furthermore, under the Settlement Agreement, recovery of net lost 13 revenues will end prior to the expiration of the 36 months upon Commission 14 approval of an alternative recovery mechanism, or the implementation of new 15 rates in a general rate case or other comparable proceeding to the extent those 16 rates are set to recover net lost revenues.

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18 The Public Staff believes that 36 months is a reasonable amount of time for the 19 recovery of net lost revenues and notes that this limited time period is similar to 20 one contained in the Agreement and Stipulation of Partial Settlement, filed by the 21 Public Staff, Progress Energy Carolinas, Inc., and Wal-Mart Stores East, L.P. in 22 Docket No. E-2, Sub 931, and approved by the Commission by Order dated June



1		15, 2009. Additionally, the settlement between Duke and the Office of Utility
2		Consumer Counselor (OUCC) in the save-a-watt proceeding in Indiana contains
3		a similar time-limit on the recovery of net lost revenues.
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5		LIMITED INCENTIVE AMOUNTS
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7	Q.	PLEASE DESCRIBE THE PUBLIC STAFF'S CONCERNS REGARDING THE
8		AMOUNT OF INCENTIVES THAT DUKE COULD RECOVER WITH THE
9		INITIAL SAVE-A-WATT PETITION.
10	Α.	The Public Staff believed that the Company's initial proposal to recover 90% of
11		the avoided costs achieved by its proposed energy efficiency and DSM
12		programs, for a period of up to 20 years, would have resulted in excessive
13		earnings by Duke and insufficient savings on energy by ratepayers. In addition,
14		the 90% of avoided cost recovery included, implicitly, the recovery of net lost
15		revenues, which the Commission considers to be an incentive for implementing
16		energy efficiency and DSM programs.
17		
18	Q.	HOW DOES THE SETTLEMENT AGREEMENT ADDRESS THESE
19		CONCERNS?
20	Α.	The Settlement Agreement provides that the Company's revenues are now to be
21		recovered on the basis of separate percentages of avoided costs for DSM and
22		energy efficiency programs. These percentages of avoided costs include 75% of

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avoided capacity costs for DSM programs and 50% of the net present value (NPV) of avoided energy costs plus 50% of the NPV of avoided capacity costs for energy efficiency programs. The recovery of these percentages of avoided costs is intended by Duke to cover its costs for adopting and implementing DSM and energy efficiency programs, along with providing a financial incentive for doing so.

- Unlike the initial save-a-watt approach, Duke's revenues to be recovered are subject to an earnings cap under the Settlement Agreement. They are limited to the amount necessary to produce after-tax returns on program costs of 5% to 15%, depending on Duke's success in reaching a targeted aggregate energy efficiency and DSM avoided costs savings level. In determining Duke's performance in reaching certain targets, the Settlement Agreement contains the provision that Duke must show, through measurement and verification, the actual energy and capacity savings it achieved through its energy efficiency and DSM programs at the conclusion of the four-year term.

In addition, the Settlement Agreement defines net lost revenues consistently
 within Commission Rule R8-68 and recognizes that net lost revenues are 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."

The Settlement Agreement further provides that Duke bears the burden of showing its actual net lost revenues through measurement and verification.

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### 4 Q. DOES THE SETTLEMENT AGREEMENT PROVIDE ANY OTHER 5 SAFEGUARD AGAINST THE COMPANY OVEREARNING?

A. Yes. The Settlement Agreement shields ratepayers from the risk of Duke
collecting revenues for its DSM and energy efficiency programs in excess of what
is allowed under the Settlement Agreement by providing for the true-up and
return, with interest, of any over-collections.

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### 11 Q. WHAT IS THE INTEREST RATE ON THIS RETURN TO CUSTOMERS?

12 A. The interest rate on customer refunds remains unresolved at this time. The 13 Commission will determine that rate at a later proceeding. The initial save-a-watt 14 petition, however, had no provision for a return to customers of overearnings with 15 interest.

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17Q.YOU HAVE TESTIFIED ABOUT THE PUBLIC STAFF'S CONCERN THAT THE18INITIAL SAVE-A-WATT MODEL ALLOWED DUKE TO EARN EXCESSIVE19INCENTIVES WHEN COMPARED TO THE PROJECTED SAVINGS AND HOW20THE SETTLEMENT AGREEMENT LIMITS THOSE INCENTIVES. DOES THE21SETTLEMENT AGREEMENT ALSO ADDRESS THE PUBLIC STAFF'S

1 CONCERN REGARDING THE AMOUNT OF ENERGY SAVINGS 2 PROJECTED?

3 Α. Yes. The Settlement Agreement provides for increased energy savings targets 4 when compared to the initial save-a-watt model. Measures implemented in each 5 vintage year of this Settlement Agreement are expected to continue to operate 6 and produce energy savings throughout its four-year term. Thus, the overall 7 energy savings percentage for each settlement year during the four-year term is 8 cumulative. This results in the energy savings percentage for the fourth year of 9 the settlement being equal to the sum of the energy savings from all four of the 10 vintage year measures operating in that year, or 1.9% of retail sales forecast for 11 year four. This represents about a 50% increase in projected savings over the 12 initial save-a-watt model. Therefore, considering the increase in the projected 13 energy savings, the Public Staff believes that the incentives that Duke has the 14 opportunity to recover under the Settlement Agreement are more reasonable 15 than those proposed in the initial save-a-watt model.

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### TRANSPARENCY

- 19 Q. PLEASE DESCRIBE THE PUBLIC STAFF'S CONCERNS REGARDING THE
- 20 LACK OF TRANSPARENCY IN THE INITIAL SAVE-A-WATT PETITION.
- A. The initial save-a-watt model based Duke's recovery on simply a percentage of
   avoided cost savings, so it was not readily evident what portions of the revenues



were compensating the Company for incurred DSM and energy efficiency program costs, net lost revenues, and additional incentives (the revenues collected in excess of incurred costs and net lost revenues). Moreover, the initial model as filed did not clearly establish Duke's obligations regarding requirements of Commission Rules R8-68 and R8-69. 163

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7 Q. PLEASE DISCUSS HOW THE SETTLEMENT AGREEMENT ADDRESSES 8 THIS CONCERN.

9 Α. The Settlement Agreement sets forth the estimated net lost revenues for its four-10 year term. These net lost revenues are now subject to measurement and 11 verification and are recovered separately from program costs and bonus 12 incentives. Moreover, the Settlement Agreement provides that Duke is still 13 obligated under Commission Rules R8-68 and R8-69, as well as the 14 Commission's February 26, 2009 Order in this docket, to provide certain 15 information when seeking approval of new DSM and energy efficiency programs 16 or measures and when adjusting its avoided cost savings targets with regard to 17 customers who "opt-out" of participating in new DSM or energy efficiency 18 The Settlement Agreement also provides that Duke will provide programs. 19 information related to its developing of energy efficiency and DSM programs to 20 stakeholders participating in its Regional Efficiency Advisory Group in a 21 transparent manner.

#### LOCKING IN AVOIDED COSTS

3 Q. PLEASE DESCRIBE THE PUBLIC STAFF'S CONCERNS ABOUT THE 4 COMPANY'S RECOVERY BEING BASED ON AVOIDED SUPPLY-SIDE 5 COSTS IN THE INITIAL SAVE-A-WATT PETITION.

6 Α. In the initial save-a-watt petition, the Company proposed to tie its revenue 7 recovery for implementing energy efficiency and DSM programs to its avoided 8 supply-side costs. Avoided costs can vary over time due to changes in the predictions of: (1) future load growth, (2) future resource mixes, and (3) changes 9 10 in projected fuel prices. Thus, they are difficult to predict with precision. At the 11 evidentiary hearing in this matter, Public Staff witness Richard F. Spellman 12 described this problem with the initial save-a-watt model, testifying that if avoided 13 supply-side costs increased from one year to the next, ratepayers would pay for 14 that increase, even if they were not receiving any additional energy efficiency or 15 demand reduction savings from Duke-sponsored programs.

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### Q. HOW DOES THE SETTLEMENT AGREEMENT ADDRESS THIS CONCERN?

A. The avoided costs savings target cannot be met merely through an increase in
 avoided costs. The Settlement Agreement shields ratepayers from this risk by
 "locking in", for the term of the agreement, the per MWh and per MW-Year
 avoided costs, except in certain limited circumstances. The avoided cost rate for
 capacity is based on the PURPA avoided capacity cost rates filed with the



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Commission, using a 1.2 performance adjustment factor, and will be set for four 1 years. The avoided costs for energy are based on the avoided energy costs per 2 3 the Company's integrated resource plan, using a comparable methodology as 4 applied in the PURPA avoided energy costs rates approved by the Commission. In addition, the Company will use the same values for per MWh and per MW for 5 6 avoided costs rates when determining targeted avoided costs savings and actual 7 avoided cost savings for the four-year term of the Settlement Agreement. 8 9 **OTHER BENEFITS TO THE SETTLEMENT AGREEMENT** 10 11 Q. ARE THERE OTHER PROVISIONS OF THE SETTLEMENT AGREEMENT 12 THAT THE PUBLIC STAFF BELIEVES ARE IMPROVEMENTS TO THE SAVE-13 A-WATT APPROACH AS INITIALLY FILED? 14 Α. Yes. The Settlement Agreement provides that no more than 35% of the target 15 may be met by DSM programs, providing an emphasis on energy efficiency programs that the initial save-a-watt model lacked. 16

In addition, the initial save-a-watt model appeared to limit participation by lowincome customers by focusing on the physical housing unit as opposed to the resident of the unit. This Settlement Agreement contains a provision that requires Duke to make residential programs available to customers without regard to whether they own or rent their homes. The Settlement Agreement also contains a commitment by Duke to pursue partnerships with third party agencies to implement programs and offer assistance to low-income customers.

#### **CONCLUSION**

### 11 Q. DID THE SETTLEMENT AGREEMENT RESOLVE ALL OUTSTANDING 12 ISSUES AMONG THE PARTIES?

13 Α. No. In addition to the later determination of the interest rate to be applied to 14 customer refunds that I have already mentioned, two issues remain outstanding. 15 First, the issue of the allocation of costs between the wholesale jurisdiction and the retail jurisdiction remains unresolved. Duke and the Environmental 16 17 Intervenors have proposed that only retail customers pay the costs associated 18 with DSM and energy efficiency programs. The Public Staff disagrees with this 19 proposal, contending that the costs and benefits of DSM and energy efficiency 20 programs should be allocated to both the wholesale and retail jurisdictions. The 21 Stipulating Parties have agreed that Duke and the Environmental Intervenors will 22 present testimony on this issue in their filing in support of the Settlement



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Agreement. By Commission order issued June 18, 2009, in this docket, the Public Staff will respond with its position on this issue in its testimony to be filed on July 2, 2009. In this way, the Stipulating Parties will present this issue to the Commission to determine.

6 The second issue is the determination of the appropriate allocation method for 7 assigning costs to customer classes. As with the jurisdictional allocation issue, 8 Duke and the Environmental Intervenors agree on this class allocation issue and 9 will present their position in the testimony that they file supporting the Settlement 10 Agreement. As directed by the Commission's June 18, 2009 order, the Public 11 Staff will present its position on this issue in responsive testimony filed on July 2, 12 2009.

14Q.OTHER THAN THE UNRESOLVED ISSUES, DO YOU BELIEVE THAT THE15TERMS AND CONDITIONS OF THIS SETTLEMENT AGREEMENT16ADEQUATELY ADDRESS THE CONCERNS THAT THE PUBLIC STAFF17IDENTIFIED IN ITS PREVIOUS ANALYSIS OF THE COMPANY'S PROPOSED18SAVE-A-WATT MODEL AS FILED?

19 A. Yes, I do.

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### 1 Q. WHAT DOES THE PUBLIC STAFF RECOMMEND?

- 2 A. The Public Staff recommends that the Commission approve the Settlement
  3 Agreement in its entirety.
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### Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

169 E-7, Sub 831 - Volume 1 1 MS. FENTRESS: Thank you. Mr. McLawhorn, do you have a summary of your 2 Q. 3 testimony? Yes, I do. 4 Α. Please give it. 5 Q. 6 (THE SUMMARY OF THE PREFILED TESTIMONY OF JAMES S. 7 MCLAWHORN WILL BE COPIED INTO THE RECORD AS GIVEN 8 ORALLY FROM THE WITNESS STAND.)

### DUKE ENERGY CAROLINAS, LLC DOCKET NO. E-7, SUB 831

#### SUMMARY OF TESTIMONY OF JAMES S. MCLAWHORN

The purpose of my testimony is to address key components of the Settlement Agreement entered into by the Southern Environmental Law Center, Environmental Defense Fund, the Natural Resources Defense Council, and Southern Alliance for Clean Energy (collectively, the Environmental Intervenors), Duke Energy Carolinas, LLC (Duke or the Company), and the Public Staff in this proceeding. With these key components, the Settlement Agreement addresses certain concerns that the Public Staff had with the initial save-a-watt methodology as proposed by Duke. The key components are: (1) the provision for a pilot program of limited duration; (2) the provisions for the more limited recovery of incentive amounts, including net lost revenues, by the Company; (3) the provision for more transparent cost and incentive recovery; and (4) the protection of ratepayers from the risks of tying revenue recovery for energy efficiency and demand-side management (DSM) programs to future avoided supply-side costs.

First, the initial save-a-watt model did not have a finite term. The Public Staff was concerned that it potentially would have resulted in the Company earning an excessive incentive to implement DSM and energy efficiency programs for an indefinite period with limited opportunity for review and modification by the Commission. The Settlement Agreement, however, provides for a limited term of four years. This term limits the exposure of the parties to unintended consequences that can result from a novel regulatory approach and is similar to the Public Staff's recommendation earlier in this proceeding that the Commission review incentive amounts after a period of three years. The Public Staff had also previously recommended that Duke's net lost revenue recovery be limited to a period of 36 months. The Settlement Agreement now reflects that recommendation and provides that Duke may recover net lost revenues for a period of 36 months for each vintage year.

Second, the Public Staff believed that the Company's initial proposal to recover 90% of the avoided costs achieved by its proposed energy efficiency and DSM programs would have resulted in excessive earnings by Duke on insufficient savings on energy by the ratepayers. Under the Settlement Agreement, however, the Company's revenues are now to be recovered on the basis of separate percentages of avoided costs for DSM and energy efficiency programs. These percentages include 75% of avoided capacity costs for DSM and 50% of the net present value (NPV) of avoided energy costs plus 50% of the NPV of avoided capacity costs for energy efficiency programs. Also, unlike the initial save-a-watt approach, Duke's revenues to be recovered are subject to earnings caps, depending on Duke's success in reaching a targeted aggregate energy efficiency and DSM avoided cost savings level. With respect to the energy savings, the Public Staff notes that the Settlement Agreement provides for an approximate 50% increase in projected energy savings when compared to the initial save-a-watt model.

With regard to net lost revenues, the Settlement Agreement further limits the recovery of net lost revenues by recognizing that they are net of any increases in revenues resulting from any activity by the Company's public utility operations that causes customers to increase demand or energy consumption. The Settlement Agreement also shields ratepayers from the risk of Duke collecting revenues in excess of what is allowed under the Settlement Agreement by providing for the true-up and return, with interest, of any over-collections.

In addition, net lost revenues are recovered separately from the program costs and incentives and are subject to separate measurement and verification, which provides for greater transparency than the initial save-a-watt approach.

Also with respect to the initial save-a-watt method, the Public Staff had voiced concerns that the Company proposed to tie its recovery for implementing energy efficiency and DSM programs to its avoided supply-side costs. Specifically, the Public Staff was concerned that if avoided supply-side costs increased from one year to the next, ratepayers would pay for that increase, even in the absence of additional energy efficiency or demand reduction from Duke-sponsored programs. The Settlement Agreement addresses this concern by "locking in" for the term of the agreement the per MWh and per MW-year avoided costs, except in certain limited circumstances.

The Settlement Agreement does not resolve all of the issues among the parties. The issue of the allocation of costs between the wholesale and retail jurisdictions and the determination of the interest rate to be applied to customer refunds remain unresolved. Public Staff witness Maness will address the cost allocation issues in his testimony. However, the terms and conditions of the Settlement Agreement adequately address the concerns that the Public Staff identified in its previous analysis of the Duke's proposed save-a-watt model as filed; therefore, the Public Staff recommends that the Commission approve it in its entirety.

This concludes my summary.

172E-7, Sub 831 - Volume 1 Mr. Maness is -- I mean, 1 MS. FENTRESS: Mr. McLawhorn is available for cross examination. 2 CHAIRMAN FINLEY: Are there any questions 3 4 of Mr. McLawhorn by the intervenors? MR. GREEN: I have no guestions, Mr. 5 Chairman. 6 7 CHAIRMAN FINLEY: Mr. Runkle. CROSS EXAMINATION BY MR. RUNKLE: 8 9 ο. Good morning, Mr. McLawhorn. 10 Α. Good morning. 11 0. Now, I had asked one of the Duke witnesses earlier about how strong a commitment this is in terms of 12 13 is Duke really required to do anything under the 14 stipulation agreement or does it just set up goals 15 and targets. Were you here for that -- for those 16 questions? 17 Α. Yes. 18 Q. In your opinion, and as in charge of the 19 Electricity Division and with the Public Staff, is 20 -- what's going to happen with this -- the save-a-21 watt proposal? Is Duke going to meet these goals? 22 Are they going to surpass the goals? Or are they 23 just going to come back in three or four years and 24 see what happens?

E-7, Sub 831 - Volume 1 Well, it's -- it's very difficult to say if they, 1 Α. in fact, will meet the goals. But it is certainly 2 3 our belief that Duke entered into the Settlement Agreement with -- with the good faith intentions of 4 5 the other parties. And we believe that Duke is planning to put forth every effort to achieve these 6 7 qoals. 8 Q. Is there any -- is there anything that the 9 Commission should do to make those targets 10 mandatory? 11 Α. Well, I -- you know, that would be up to the 12 Commission as to how strongly they feel about that 13 and how sincere that they believe Duke is in meeting these targets. I am satisfied that Duke is 14 15 committed to doing this. 16 MR. RUNKLE: I have no further questions. CHAIRMAN FINLEY: Other intervenors? 17 18 MR. HOLTZMAN: No, sir. 19 CHAIRMAN FINLEY: Duke? 20 MS. HEIGEL: No, Mr. Chairman. 21 CHAIRMAN FINLEY: Cross? I mean, 22 redirect? 23 Just very briefly. MS. FENTRESS: 24 REDIRECT EXAMINATION BY MS. FENTRESS:

174 E-7, Sub 831 - Volume 1 1 Q. Mr. McLawhorn, Mr. Runkle asked you about Duke's 2 ability to meet the targets. There is a tiered 3 target system, is there not? 4 Ά. That is correct. 5 Q. And would you say that the recovery is tied to what proportion of the target they -- they hit? 6 7 Α. Yes. That was the design of the -- the agreement. 8 ο. And was that present in the initial save-a-watt 9 proposal? No, it was not. 10 Α. 11 MS. FENTRESS: Thank you. That's all I 12 have. 13 CHAIRMAN FINLEY: Questions by the 14 Commission? Commissioner Joyner. 15 COMMISSIONER JOYNER: I have just a 16 couple. In your prefiled testimony, Mr. McLawhorn, 17 one of the things that you discuss is how the 18 Settlement Agreement that the staff supports addresses the Public Staff's concerns about the 19 20 lack of transparency that -- that you assert 21 existed in the original petition. Do you 22 understand -- do you recall that discussion? 23 THE WITNESS: Yes. 24 COMMISSIONER JOYNER: Let me confess that

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1	I had meant to ask this question of Mr. Schultz and
2	forgot. Fortunately, you mentioned the regional
3	efficiency advisory group in your testimony so
4	so I catch you on that. Mr. Schultz's testimony
5	refers to the creation of a regional efficiency
6	advisory committee. And and you've mentioned
7	that too. Is it your understanding that this is
8	going to be a a new organization or a new
9	entity? And the reason I ask is that in prior
10	dockets, the numbers of which escape me now, we
11	have had discussions from Duke witnesses about
12	using stakeholder groups to to develop programs.
13	And my sense was that that was an ongoing
14	initiative, that that was a very useful initiative
15	in figuring out what programs, efficiency programs
16	or DSM I guess, would work. And I'm trying to
17	figure out if this is a new entity if the existing
18	advisory or stakeholder group is is continuing
19	in this iteration or whether that has been
20	discontinued. Do you do you have any insight on
21	that?
22	THE WITNESS: I I do not. I am
23	familiar with the collaborative group that Duke had
24	prior to the original save-a-watt filing because

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176 E-7, Sub 831 - Volume 1 the Public Staff was a participant in that. 1 But what the exact plans are for this one and how 2 closely it will or will not resemble that -- that 3 group, I don't know. 4 CHAIRMAN FINLEY: The Settlement 5 Agreement, though, does provide that the Public 6 7 Staff will be able to -- to monitor the work of that advisory group, doesn't it? 8 9 THE WITNESS: Yes, I would anticipate 10 that our role will be -- that our role, the Public 11 Staff's role, will be similar to the role we played 12 in the original collaborative effort. 13 COMMISSIONER JOYNER: The -- the other 14 thing I'm interested in is whether or not you have 15 reviewed the testimony of Mr. Colton that's been filed in this case. 16 THE WITNESS: I did review it. 17 I'm not 18 intimately familiar with it, but I did review his 19 testimony. 20 COMMISSIONER JOYNER: As the -- a part of 21 an agency charged with representing the interest of 22 the using and consuming public, have you evaluated 23 and formed an opinion as to the sufficiency of this 24 proposal in terms of its meeting the needs of low-

177 E-7, Sub 831 - Volume 1 income consumers in North Carolina? 1 2 THE WITNESS: Well, I don't know that we have determined that this proposal meets all of the 3 needs for low-income customers from now on. 4 We certainly think that there were some positive steps 5 made to address the needs of low-income customers 6 7 in this proposal. I think I noted in my testimony that there were, you know -- the availability of 8 9 the programs to customers who are renters as well 10 as owners of their home, which was not there before, is certainly an extension of the benefits 11 12 to low-income customers. 13 Duke has also, I believe, made 14 commitments to work with other third-party 15 organizations to try to enhance the -- the low 16 income energy efficiency efforts. So there 17 certainly is a greater commitment than there was 18 But I, you know, couldn't say that this is before. 19 it; this is all we need to be doing. 20 COMMISSIONER JOYNER: And -- and what 21 we're looking at here is a pilot of a -- of a finite duration? 22 23 That is correct. THE WITNESS: 24 COMMISSIONER JOYNER: And is my

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	E-7, Sub 831 - Volume 1
1	assumption accurate that either through the
2	regional advisory group or some other mechanism,
3	the Company and other interested stakeholders will
4	continue to evaluate and develop programs,
5	hopefully that will extend the benefits of of
6	efficiency to all of its customers without regard
7	to to income?
8	THE WITNESS: I certainly I believe
9	so. I know the Public Staff believes that that is
10	what will take place, and other parties as well.
11	COMMISSIONER JOYNER: And and my my
12	final question is whether or not to the extent that
13	that you are participating and monitoring this
14	process, whether or not this is an issue that the
15	Public Staff will will attend to and monitor.
16	THE WITNESS: Certainly we will.
17	COMMISSIONER JOYNER: Thank you.
18	CHAIRMAN FINLEY: Mr. Culpepper.
19	COMMISSIONER CULPEPPER: Mr. McLawhorn,
20	have you got this attachment 8-1 in front of you?
21	THE WITNESS: No, sir. I do not.
22	COMMISSIONER CULPEPPER: Let's see if
23	your lawyer can get it in front of you. Well, let
24	me ask you this while she's getting that. Have you

179 E-7; Sub 831 - Volume 1 1 got the -- have you got the Settlement Agreement in 2 front of you? THE WITNESS: I do have that. 3 COMMISSIONER CULPEPPER: How about 4 flipping over to page 20 on that. 5 6 THE WITNESS: Okay. 7 COMMISSIONER CULPEPPER: All right. 8 You've got attachment 8-1 now. If you'd go to page 9 2 of 2 of that, and tell me when you're there. 10 THE WITNESS: Two of two, okay. 11 COMMISSIONER CULPEPPER: Yeah, it's 12 supposed to be 2 of 2. Looks like it's three 13 pages, but anyhow. 14 THE WITNESS: All right. 15 COMMISSIONER CULPEPPER: See down there 16 toward the bottom, three lines up, it says total 17 avoided cost \$753,611,563? 18 THE WITNESS: Yes, I see that number. 19 COMMISSIONER CULPEPPER: All right. Take 20 a look at page 20, item 6, it says the Company's 21 avoided cost target is \$754 million? 22 THE WITNESS: Yes, sir. 23 COMMISSIONER CULPEPPER: Is that the same 24 Are we talking about the same figures figures?

180E-7, Sub 831 - Volume 1 there? 1 2 THE WITNESS: I believe so, yes. 3 COMMISSIONER CULPEPPER: Well, based on 4 Mr. -- witness Smith's testimony these figures on attachment 8-1 are North Carolina and South 5 6 Carolina. Is that what you understood his 7 testimony to be? THE WITNESS: That's what I understood. 8 9 COMMISSIONER CULPEPPER: So are you 10 saying this \$754 million figure that is in item 6 11 on Exhibit B attached to the Settlement Agreement 12 in this North Carolina case involves a figure that 13 involves both North Carolina and South Carolina? 14 THE WITNESS: Yes. If you look right 15 after that I believe it says that it's system 16 dollars. So whenever I see the word system, that -17 - to me that says North Carolina and South 18 Carolina. 19 COMMISSIONER CULPEPPER: Okay. So -- so 20 the system portfolio impacts, that's a system --21 and that's in the same item there, number 6. 22 That's North Carolina and South Carolina too? 23 THE WITNESS: That's correct. 24 COMMISSIONER CULPEPPER: Is there

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anywhere that that the Commission can take a
look and see what's going to happen if we approve
this settlement happen here in North Carolina as
opposed to just systemwide? Because we can only
decide a case based on, you know, decide here in
North Carolina. South Carolina is going to do what
they're going to do in another case.

8 THE WITNESS: I am sure that there is a 9 way to estimate what the -- the programs will 10 produce in -- in North Carolina, although I believe 11 it's Duke's intent to implement the programs on a systemwide basis. But you're right; South Carolina 12 13 could do -- they could do something entirely 14 different from what we do that could impact the 15 ability to achieve those targets on a -- from their 16 -- in the state of South Carolina.

17 COMMISSIONER CULPEPPER: All right.18 Thank you.

19CHAIRMAN FINLEY: All right. A couple of20questions, Mr. McLawhorn. We have this issue of21incentives versus mandates. Am I not correct in my22understanding that with respect to both energy23efficiency measures and demand-side management24measures, part of the success of the programs

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1	depends on what the consumer of the services of
2	Duke does?
3	THE WITNESS: Yes, sir. It does.
4	CHAIRMAN FINLEY: And are you aware of
5	something that Duke could do or that this
6	Commission could do to mandate that the customers
7	sign up for the programs and use the programs as
8	they are intended?
9	THE WITNESS: That would mandate that
10	customers do that? Well, I I guess you could
11	make well, I think it would be difficult on
1 <b>2</b>	energy efficiency. I mean, you know, the
13	Commission could certainly change its rules on
14	demand response. It well, I can't speak for the
15	entire Public Staff. It wouldn't be my
16	recommendation that you do that, but you could
17	you could, I guess, change your rules that said
18	that if a new customer comes onto the Duke system
19	they would have to agree to implement DSM. But
20	that would not be my recommendation. Mr. Gruber
21	might see it differently. I don't think so.
22	CHAIRMAN FINLEY: Part of the Senate Bill
23	3, it has a reps requirement, right?
24	THE WITNESS: Yes.

183 E-7, Sub 831 - Volume 1 CHAIRMAN FINLEY: And that's a mandate? 1 CHAIRMAN FINLEY: That is. 2 3 CHAIRMAN FINLEY: And part of the ability of Duke and Progress and Dominion to meet the 4 5 mandate can be to take use of energy efficiency, 6 right? 7 THE WITNESS: 25 percent, I believe, 8 initially. 9 CHAIRMAN FINLEY: So Senate Bill 3 has both carrots and sticks? It has mandates and it 10 11 has incentives? 12 THE WITNESS: Yes. 13 CHAIRMAN FINLEY: All right. Thanks. 14 Any questions on the Commission's questions? 15 MS. NICHOLS: I do have just one or two. 16 CROSS EXAMINATION BY MS. NICHOLS: Mr. McLawhorn, you're familiar with Duke's IRP, 17 Q. 18 correct? 19 Α. Yes, generally. 20 And that -- and Duke plans its system on a system **Q**. 21 basis for both North Carolina and South Carolina, 22 correct? 23 Α. That is correct. 24 So when it's looking at a resource such as the Q.

184 E-7, Sub 831 - Volume 1 Cliffside Unit 6 that's under construction, it 1 looks at that -- it looks at its need on a system 2 basis and it looks at resources on a system basis, 3 correct? 4 That's correct. That should be the more economical 5 Α. and efficient way to plan. 6 And energy efficiency and DSM are just another 7 Q. resource to meet its customers' needs, correct? 8 9 Α. Yes. 10 Q. So when you look at the -- the energy efficiency 11 plan being presented here, that's a resource that 12 is input into the overall IRP, correct? 13 Yes, it is. Α. 14 MS. NICHOLS: Thank you. Other questions on the 15 CHAIRMAN FINLEY: 16 Commission's questions? 17 (NO RESPONSE.) 18 CHAIRMAN FINLEY: All right. Thank you, 19 Mr. McLawhorn. 20 THE WITNESS: Thank you. 21 (WITNESS EXCUSED.) 22 MS. FENTRESS: We would move -- well, I 23 don't think there were any exhibits. 24 CHAIRMAN FINLEY: All he had was an

E-7, Sub 831 - Volume 1 1 appendix, and we'll take that as part of his 2 testimony. 3 MS. FENTRESS: That's -- yes, please do. And we would call Mike Maness. 4 5 CHAIRMAN FINLEY: Did we get all the Duke exhibits in? 6 7 MS. NICHOLS: We did not. I was going to do that when we brought Mr. Smith back, but we 8 9 would move both Smith Exhibit 1 as well as the Duke Hearing Exhibit 1 that we introduced at the 10 beginning of the hearing, the Responses to the 11 12 Commission's Order that were filed on August 10. 13 CHAIRMAN FINLEY: All right. Without 14 objection, those exhibits will be received into 15 evidence. (SMITH DIRECT EXHIBIT NO. 1 AND 16 DUKE HEARING EXHIBIT NO. 1 WERE 17 18 ADMITTED INTO EVIDENCE.) 19 (WHEREUPON, MICHAEL C. MANESS WAS CALLED AS A WITNESS, DULY SWORN, AND TESTIFIED AS FOLLOWS:) 20 21 DIRECT EXAMINATION BY MS. FENTRESS: 22 MS. FENTRESS: Mr. Chairman, for the 23 record Mr. Green is assisting me in passing out 24 replacement pages for Mr. Maness' testimony that --

NORTH CAROLINA UTILITIES COMMISSION

186 E-7, Sub 831 - Volume 1 his original testimony contained a formatting 1 2 error, which I alerted the Commission to by letter. I'd like to replace the testimony with those pages, 3 and I will walk Mr. Maness through those 4 5 corrections as soon as everybody gets a copy of it. CHAIRMAN FINLEY: And let's get your mic 6 7 in front of you there, Ms. Fentress. 8 0. (By Ms. Fentress) Good afternoon, Mr. Maness, 9 almost afternoon. Good afternoon. 10 Α. 11 Q. Can you please state your name, address, and 12 present position for the record? 13 Α. My name is Michael C. Maness. My business address is 430 North Salisbury Street, Raleigh, North 14 15 Carolina. And my present position is assistant director of the Accounting Division of the Public 16 17 Staff. 18 And Mr. Maness, did you prepare and cause to be Ο. filed in this docket prefiled supplemental --19 20 supplementary testimony on July 2, 2009 consisting 21 of 20 pages and three exhibits? 22 Α. Yes. 23 And Mr. Maness, do you have any corrections to make Q. to your testimony and, if so, could you start with 24

187 E-7, Sub 831 - Volume 1 the formatting correction? 1 2 Yes, I do. On page 3 of my testimony as originally Α. 3 filed the last paragraph on the page, which began on line 25, should have been indented on the left 4 5 and the right as a direct quotation. And that has 6 been corrected on the replacement page that's just 7 been distributed. Then on page 6, beginning on line 1, in 8 the testimony as originally filed the first seven 9 10 lines are indented on the right and the left as if 11 a direct quotation. Those are, in fact, not a 12 quotation and should have been set out at the 13 regular margins. And that has been also corrected 14 in the replacement pages --15 0. And --16 -- that have been distributed. Α. 17 Ο. And the replacement pages contain no changes to 18 text. It's only those formatting changes. Is that 19 correct? 20 Α. Yes. 21 Thank you. And do you have any other corrections? Q. I do. On page 1 of my testimony, line 15, the 22 Α. title of the Settlement Agreement in italics there, 23 Agreement and Joint Stipulation of Settlement, the 24

188 E-7, Sub 831 - Volume 1 word stipulation should be italicized. 1 2 Then on page 5 of my testimony, on line 3 I have an insertion. The sentence that begins 3 "Commission Rule R8-69," at the beginning of that 4 5 sentence should be the words "paragraph (b)(1) of" and then continue on "Commission Rule R8-69." 6 7 Then on page 18 of my testimony, line 20, 8 the second to last word on that line "cost" should 9 be deleted. 10 Then on Maness Exhibit 1 -- excuse me, 11 Maness Exhibit 2, page 1 of 2, that's attached to 12 my testimony -- on line 15 in the column denoted 13 Item the word "energy" should be replaced with 14 "demand." And on the very next page, page 2 of 2 15 of that exhibit, on line 34 the same change should 16 be made; the word "energy" should be replaced with "demand." 17 18 Q. And are those all your corrections? 19 Α. Yes. 20 Q. Mr. Maness, if you were asked the same questions 21 today would your answers be the same? 22 Yes, they would. Α. 23 Mr. Maness, did you also file two exhibits in Q. 24 response to the Commission's August 14, 2009 pre-

189 E-7, Sub 831 - Volume 1 hearing request for verified information? 1 Yes, I did. 2 Α. 3 Q. And do you have any corrections to those exhibits? 4 Α. No, I do not. 5 MS. FENTRESS: I would request that the 6 prefiled testimony and exhibits be copied into the 7 record with the noted corrections. 8 CHAIRMAN FINLEY: Well, we will copy the 9 prefiled direct testimony into the record as though given orally from the stand, and we will -- as 10 11 amended and corrected, and we will mark the exhibits, both the exhibits filed with the 12 13 testimony on July 2 and the supplemental exhibits 14 for identification purposes at this point. 15 (THE PREFILED SUPPLEMENTAL TESTIMONY OF MICHAEL C. 16 MANESS, AS AMENDED AND CORRECTED, WILL BE COPIED INTO THE RECORD AS IF GIVEN ORALLY FROM THE WITNESS 17 18 STAND AND MANESS EXHIBITS AND SUPPLEMENTAL EXHIBITS 19 WERE MARKED FOR IDENTIFICATION.)

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#### DUKE ENERGY CAROLINAS, LLC DOCKET NO. E-7, SUB 831

Clerida Office N.C. Utilities Commission

## SUPPLEMENTAL TESTIMONY OF MICHAEL C. MANESS ON BEHALF OF THE PUBLIC STAFF NORTH CAROLINA UTILITIES COMMISSION

#### July 2, 2009

1	Q.	MR. MANESS, HAVE YOU PREVIOUSLY PRESENTED TESTIMONY IN THIS
2		PROCEEDING?
3	Α.	Yes. On June 26, 2008, the Public Staff filed my initial direct testimony in this
4		proceeding, which I presented at the hearing that began on July 28, 2008.
5		Additionally, on August 25, 2008, the Public Staff filed my affidavit addressing a
6		portion of the supplemental testimony and exhibits of Duke Energy Carolinas, LLC
7		(Duke or the Company) witness Theodore E. Schultz.

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#### 9 Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL TESTIMONY?

A. The purpose of my supplemental testimony is to satisfy the requirements of the
Commission's Order Scheduling Hearing to Consider "Agreement and Joint
Stipulation of Settlement" (Settlement Hearing Order), issued on June 18, 2009. In
the Settlement Hearing Order, the Commission required both Duke and the Public
Staff to file (a) Modified Internal Rate of Return (MIRR) analyses consistent with the
terms of the Agreement and Joint Stipulation of Settlement (Agreement) filed on



June 12, 2009,<sup>1</sup> given their respective positions on the appropriate inputs to the MIRR calculations, and (b) testimony regarding the outstanding issue between Duke, the Public Staff, and the Environmental Intervenors (the Stipulating Parties) of the appropriate jurisdictional allocation method to use in determining the North Carolina retail Demand-Side Management / Energy Efficiency Rider (DSM/EE Rider). My supplemental testimony addresses both of these requirements, and also sets forth the Public Staff's recommended DSM/EE rider.

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# 9 ALLOCATION OF SYSTEM AMOUNTS TO NORTH CAROLINA RETAIL OPERATIONS

- 10 Q. HOW DOES THE AGREEMENT PROVIDE FOR THE ISSUE OF
- 11 JURISDICTIONAL ALLOCATIONS TO BE RESOLVED?
- 12 A. Paragraph H.8 of Exhibit B (the Settlement Terms) of the Agreement reads as
  - follows:

The North Carolina retail revenue requirement applicable to demandside management, energy efficiency programs, and net lost revenues will be determined by allocating the various inputs to the revenue calculation (avoided costs, program costs, net lost revenues, etc.) to the North Carolina retail jurisdiction and then applying the percentages and other revenue requirement determinants set forth in this agreement.

The Stipulating Parties will present the issue of the appropriate jurisdictional allocation method to the Commission through testimony in this matter. For purposes of determining the North Carolina retail revenue requirement, Duke Energy Carolinas and the Environmental Intervenors agree that (1) for demand-side management programs, inputs will be allocated between the North Carolina and South Carolina retail jurisdictions based on contributions to system retail peak demand by all system retail customers based on the cost of service study, and (2) for energy efficiency programs and net lost

<sup>&</sup>lt;sup>1</sup> The Agreement was filed by the Public Staff and Duke, along with the Southern Alliance for Clean Energy, the Environmental Defense Fund, the Natural Resources Defense Council, and the Southern Environmental Law Center (collectively, the Environmental Intervenors).

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revenues, inputs will be assigned to the North Carolina and South Carolina retail jurisdictions based on kWh sales to system retail customers from the cost of service study. The program costs allocated under this methodology will be used to calculate the earnings cap.

The Public Staff does not agree with the allocation methodology proposed by Duke and the Environmental Intervenors and instead proposes that (1) for demand-side management programs, inputs will be allocated to the North Carolina retail jurisdiction based on contributions to total system peak demand by all system customers, retail and wholesale, and (2) for energy efficiency programs, inputs should be allocated to the North Carolina retail jurisdiction based on kWh sales to all system customers, retail and wholesale.

## 16 Q. HAS THE COMPANY PRESENTED TESTIMONY ON THIS MATTER?

17 A. Yes. On June 19, 2009, the Company filed the Settlement Testimony of Stephen M.

18 Farmer (Settlement Testimony), setting forth its discussion of this issue. Mr. Farmer 19 indicates that the Company believes that because its proposed DSM and EE 20 programs are directed specifically at its retail customers, it is appropriate to recover 21 the costs of those programs only from those customers. Mr. Farmer testifies that 22 this approach is more consistent than that of the Public Staff with G.S. 62-133.9(e), 23 which reads as follows:

The Commission shall determine the appropriate assignment of costs of new demand-side management and energy efficiency measures for electric public utilities and shall assign the costs of the programs only to the class or classes of customers that directly benefit from the programs.

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However, Mr. Farmer does not dispute the fact that all customers likely will receive benefits (which he describes as "indirect") from the Company's programs.

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# 4 Q. WHY DOES THE PUBLIC STAFF DISAGREE WITH THE COMPANY'S 5 POSITION?

6 Α. The Company relies on the language of G.S. 62-133.9(e) to guide its position. In 7 other words, the Company seems to indicate that because that subsection requires 8 the assignment of new DSM and EE program costs only to customer classes that 9 directly benefit from the programs (i.e., under the Company's position, participate in 10 the programs), the statute would also logically require the allocation or assignment 11 of those costs only to the jurisdictions that benefit (participate) in the same manner. 12 However, there is no language anywhere in the statute that refers to the methods to 13 be used to allocate costs between jurisdictions for North Carolina retail ratemaking 14 purposes. Furthermore, it is a long-standing regulatory practice in this State that 15 jurisdictional allocations and customer class allocations are separate (albeit related) 16 ratemaking procedures for electric public utilities. In this process, jurisdictional 17 allocation methods, formulas, and factors are first applied to system revenues and 18 costs to determine the appropriate change to total North Carolina retail revenues 19 necessary to attain the total North Carolina retail revenue requirement. Only then is 20 the North Carolina retail revenue requirement assigned or allocated to specific 21 customer classes. Therefore, it is not clear that G.S. 62-133.9(e) was intended to 22 address jurisdictional cost allocations at all.

1	When adopting the rules required to implement Senate Bill 3, the Commission
2	appeared to interpret G.S. 62-133.9(e) consistently with this long-standing
3	regulatory practice. Commission Rule R8-69 - Cost Recovery for Demand-Side
4	Management and Energy Efficiency Measures of Electric Public Utilities - reads as
5	follows, in pertinent part:
6 7 8 9 10 11	Those expenses approved for recovery shall be allocated to the North Carolina retail jurisdiction consistent with the system benefits provided by the new demand-side management and energy efficiency measures and shall be assigned to customer classes in accordance with G.S. 62-133.9(e) and (f).
12	In its Order Adopting Final Rules, (Rules Order) issued in Docket No. E-100, Sub
13	113, on February 29, 2008, the Commission stated as follows regarding the issue of
14	cost allocation and paragraph R8-69(b)(1) when addressing a Progress Energy
15	Carolinas, Inc., proposal to in part allocate DSM and EE costs only to retail
16	customers:
17 18 19 20 21 22 23 24 25	As explained elsewhere herein, issues involving cost allocation are complex. Additionally, the manner in which such issues are ultimately resolved has important consequences. The appropriate resolution of cost allocation issues almost always requires evidentiary proceedings. The present issue is no exception to that general rule. Indeed, the Commission is of the opinion that the record in this rulemaking proceeding is plainly inadequate to allow the Commission to make an informed decision.
26 27 28 29 30 31 32 33	<ul> <li>Therefore, based upon the foregoing logic and the entire record of this proceeding, the Commission finds and concludes that it should not include a requirement in the provisions of this Rule that would mandate the use of a particular cost allocation methodology and/or require that the costs at issue here be recovered solely from retail customers.</li> <li>(Rules Order, pp. 114-15).</li> </ul>



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If the Commission had believed that the language of G.S. 62-133.9(e) required DSM and EE costs to be allocated to only the retail jurisdictions, it could have simply said so and written its rule accordingly; however, it chose not to do so. Furthermore, the portion of Rule R8-69(b)(1) that both refers to jurisdictional allocation separately from class allocation and states that jurisdictional allocation allocation shall be consistent with "system benefits" remained intact.

Based on all of the factors cited above, therefore, the Public Staff believes that G.S. 9 10 62-133.9(e) does not control the jurisdictional allocation of system DSM and EE 11 costs and revenues to North Carolina retail operations. In reaching this conclusion, 12 I note that if the General Assembly's purpose in creating this statutory provision 13 within Senate Bill 3 was to protect certain customer classes from having DSM and EE costs unreasonably allocated to them, it is also evident that the allocation of 14 costs to the wholesale jurisdiction does not advantage or disadvantage any North 15 Carolina retail customer class relative to any other. 16

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18 Since the Public Staff does not believe that G.S. 62-133.9(e) controls jurisdictional 19 cost allocation, the question is then what system benefits in particular are 20 appropriate for determining jurisdictional cost allocation pursuant to Rule R8-21 The Public Staff believes that allocating costs only to the retail 69(b)(1). 22 jurisdictions, as the Company proposes, does not reflect the system benefits that 23 will arise from implementation of DSM and EE programs. The benefit of a DSM or 24 EE program to the utility system is the long-term reduction in cost of service achieved by the utility as a result of it acquiring DSM and EE resources to serve 25

load growth at a lower cost than-would have been incurred had the utility instead been required to serve that load growth through acquisition of supply-side resources. This reduction in cost can typically be expected to accrue to the benefit of all system customers (although perhaps in varying amounts). This benefit should be the basis for determining the jurisdictional allocation of program costs and incentives.

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## 8 Q. PLEASE ELABORATE.

9 Α. The primary benefits sought by a utility implementing DSM and EE programs are 10 the utility cost reductions that will accrue in some amount to the entire system, 11 including wholesale operations, through the freeing up of existing system capacity 12 and energy resources to serve growth in system demand and energy requirements. 13 The utility is thereby relieved of the burden of serving that growth through the 14 construction or purchase of additional supply-side resources at marginal cost. 15 These are the benefits measured in the Utility Cost Test (UCT) and the Total 16 Resource Cost (TRC) Test - the marginal supply-side resource acquisition and 17 operation costs avoided as a result of implementing a DSM or EE program. Since 18 achieving those system benefits is the essential purpose of the DSM and EE 19 programs, those benefits should be the basis for determining which DSM and EE 20 program costs and incentives are assigned or allocated to the North Carolina retail 21 jurisdiction. Those benefits include benefits accruing to the wholesale jurisdiction.

# Q. WHY DO YOU SAY THAT THE COST REDUCTIONS RESULTING FROM UTILITY IMPLEMENTATION OF DSM AND EE PROGRAMS WILL ACCRUE IN SOME AMOUNT TO ALL SYSTEM CUSTOMERS?

4 Α. The costs that are avoided through the operation of cost-effective DSM and EE 5 programs are for the most part demand- and energy-driven generation and 6 transmission costs (both capitalized and expensed). The Company operates its 7 generation and transmission system on a total system basis. Accordingly, for 8 ratemaking purposes, the Commission has traditionally not directly assigned 9 system-level generation and transmission costs to particular jurisdictions, but 10 instead has allocated those costs to jurisdictions on the basis of demand at the 11 system peak and annual energy usage as percentages of total system peak 12 demand and annual energy usage, respectively. Thus, the costs avoided by 13 utilization of DSM and EE, if incurred instead, would likely have been handled for 14 ratemaking purposes by aggregating them with other generation and production 15 costs on a total system basis and then allocating the total to all jurisdictions. This 16 treatment would allocate the costs incurred at the margin to all jurisdictions, not just 17 the jurisdictions in which demand and energy growth had occurred. Therefore, if 18 demand and energy growth at the North Carolina retail level is avoided through the 19 use of DSM and EE programs, the benefits of thereby avoiding supply-side costs at 20 the margin are also spread among all of the jurisdictions.

BASED ON ALL OF THESE FACTORS. WHAT IS THE PUBLIC STAFF'S 1 Q. 2 CONCLUSION REGARDING JURISDICTIONAL COST ALLOCATION? 3 The Public Staff believes that the appropriate and reasonable manner of allocating Α. 4 the costs and incentives reflected in the DSM/EE Rider is to treat those costs and 5 incentives as total system costs, and allocate them across the total system. including the wholesale jurisdiction. 6 7 HAS THE PUBLIC STAFF MAINTAINED THIS POSITION THROUGHOUT THIS 8 Q. 9 PROCEEDING? 10 Α. Yes. In my direct testimony filed on June 26, 2008, I stated that in the Public Staff's 11 opinion, the DSM and EE programs proposed by the Company directly benefit both 12 the retail and system wholesale customers and should be allocated accordingly for 13 purposes of a DSM/EE Rider.<sup>2</sup> 14 15 **Q**. HOW DID THE COMPANY RESPOND TO YOUR TESTIMONY? 16 Α. In his rebuttal testimony filed on July 21, 2008, Company witness Farmer stated that 17 the Company did not "oppose or object to" the Public Staff's recommendation regarding jurisdictional cost allocation, and that it was based on "standard cost of 18 service principles ... rooted in sound economic theory." However, Mr. Farmer also 19

- 20 noted the language of G.S. 62-133.9(e), and stated that it made the Public Staff's
- 21 recommendation "problematic."<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> Tr. Vol. 9, pp. 19-20.

<sup>&</sup>lt;sup>3</sup> Tr. Vol. 5, p. 88.

DO YOU HAVE ANY OTHER COMMENTS REGARDING COST ALLOCATION? Q. 1 2 Α. Yes. With regard to the allocation of North Carolina retail revenue requirements to 3 customer groups, Paragraph H.9 of the Settlement Terms of the Agreement reads as follows: 4 5 Within the North Carolina retail jurisdiction, customer group revenue 6 requirements applicable to demand-side management and energy 7 efficiency programs will be determined by assigning or allocating the 8 North Carolina retail revenue requirement to the various customer groups. The appropriate allocation or assignment method to be used 9 10 for these purposes will be determined by the Commission in this 11 proceeding. 12 13 On page 11 of his Settlement Testimony, Company witness Farmer states that "It like 14 only remaining item of contention [excepting jurisdictional allocation] is that the 15 Public Staff believes it would be more appropriate to allocate revenue requirement on a class-by-class basis rather than on a 'residential' and 'non-residential' basis 16 17 ...." With this language, Mr. Farmer appears to refer to the topic of whether Duke 18 should be allowed to implement just one non-residential rate, rather than separate rates for each of the individual non-residential customer classes. As shown by 19 20 Paragraph H.9, the Public Staff is not contesting that Company proposal; instead, 21 the method of allocation to customer groups is the disputed issue. Pursuant to 22 discussions with Duke personnel, the Public Staff understands that Duke plans to 23 clarify this matter prior to the reconvened hearing.

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1 Q. WHAT IS THE PUBLIC STAFF'S POSITION ON THE ISSUE OF ALLOCATION OF 2 NORTH CAROLINA RETAIL REVENUE REQUIREMENTS TO CUSTOMER 3 CLASSES? 7.6C

A. The Public Staff believes that allocation of North Carolina retail DSM and EE
revenue requirements to customer classes is, unlike jurisdictional allocation
discussed above, controlled by G.S. 62-133.9(e). Based on the Public Staff's
interpretation of that statute, allocation of North Carolina retail DSM and EE revenue
requirements to customer classes should be based on the same contribution to
system peak load and system energy requirements methodology that it believes is
appropriate for jurisdictional cost allocations.

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The Public Staff acknowledges that the Commission has recently disagreed with it on this issue, in Docket No. E-2, Sub 931; however, the Public Staff still believes in the correctness of its position, and respectfully requests the Commission to reach a different conclusion in this proceeding.

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17 Q. HAVE YOU PREPARED ANY SCHEDULES SETTING FORTH THE NORTH
18 CAROLINA RETAIL REVENUE REQUIREMENTS CALCULATED IN
19 ACCORDANCE WITH THE PUBLIC STAFF'S POSITION ON COST
20 ALLOCATION?

1	<b>A</b> .	Yes. Maness Exhibit 2, attached to my supplemental testimony, sets forth the
2		estimated North Carolina retail residential and non-residential revenue requirements
3		and DSM/EE riders for each of the four years of the settlement term.
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5		MIRR CALCULATIONS
6	Q.	PLEASE PROVIDE A BRIEF SUMMARY OF THE MIRR CALCULATIONS THAT
7		HAVE PREVIOUSLY BEEN FILED IN THIS PROCEEDING.
8	Α.	During the initial hearing held in this proceeding, the Commission asked the
9		Company to provide the internal rate of return it expected to achieve with respect to
10		each DSM and EE program proposed in its application in this subdocket. In
11		response, Company witness Schultz filed, as Confidential Schultz Supplemental
12		Exhibit No. 1, MIRR calculations for each program, as well as for aggregate
13		groupings of residential, non-residential, and total programs.
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15		On February 26, 2009, the Commission issued its Order Resolving Certain Issues,
16		Requesting Information on Unsettled Matters, and Allowing Proposed Rider to
17		Become Effective Subject to Refund (Initial Order). As part of the Initial Order, the
18		Commission required Duke to file MIRR calculations for several scenarios.
19		Accordingly, on March 31, 2009, Duke filed its Response to Order Requesting
20		Information on Unsettled Matters (Response to Initial Order), in which it presented a
21		modified MIRR calculation for the case set forth in Confidential Schultz
22		Supplemental Exhibit No. 1, as well as MIRR calculations for nine separate

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scenarios. These MIRR calculations reflected three significant departures from 1 2 those presented on Confidential Schultz Supplemental Exhibit No. 1: first, existing 3 Interruptible Service (IS) and Standby Generation (SG) customers were excluded 4 from the analysis, consistent with the provisions of the Initial Order; second, a single 5 time period of 18 years was used as the investment period for each program and 6 grouping of programs presented for each scenario; and third, the benefit and cost 7 impacts of the Company's two DSM programs, Power Manager and Power Share, 8 were truncated to four years.

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10 Finally, as noted previously, in the Settlement Hearing Order the Commission has 11 required both Duke and the Public Staff to file MIRR calculations to reflect the terms 12 of the Agreement and their respective positions on how the MIRR calculations 13 should be performed. On June 26, 2009, the Company filed the MIRR Supporting 14 Testimony of Raiford L. Smith, along with Smith Exhibit No. 1, which sets forth the 15 Company's calculation of MIRRs consistent with the terms of the Agreement. 16 These calculations continued to reflect the above-described modifications to the 17 calculations introduced in the Company's Response to Initial Order.

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19 Q.HAVE YOU REVIEWED COMPANY WITNESS SMITH'S TESTIMONY AND20EXHIBIT?

21 A. Yes.

1 Q. DO YOU HAVE ANY COMMENTS REGARDING YOUR REVIEW OF HIS 2 TESTIMONY AND EXHIBIT? 71:

3 Α. Yes. Before I specifically discuss his testimony and exhibit. I would reiterate the 4 comments I made in my affidavit, filed on August 25, 2008. During the Public Staff's 5 investigation of this case. I made a significant effort to generate a rate-of-return-type 6 measurement by which the cost recovery and incentive mechanisms proposed by 7 the Company and the Public Staff could be evaluated from a financial basis. For various reasons, this did not prove possible. A portion of this effort included 8 9 consideration of the MIRR approach. However, I found that the MIRR calculations 10 for the programs proposed by Duke were too heavily influenced by the overall rate 11 of return used in the formula (7.46%) to provide accurate and reasonably 12 differentiating results. Therefore, because of the difficulty of isolating and 13 quantifying specific internal rates of return for each program, and because of heavy 14 bias toward the overall cost of capital implicit in the MIRR calculation, the Public 15 Staff concluded, and still believes, that a net present value (NPV) margin approach 16 is the most appropriate method by which to estimate the potential profitability of Duke's proposal. I note that Company witness Smith expresses similar concerns 17 18 regarding the MIRR in his testimony.

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20 Q. WHAT OTHER CONCLUSIONS HAVE YOU DRAWN FROM YOUR REVIEW OF
21 MR. SMITH'S TESTIMONY AND CALCULATIONS?

A. First, Mr. Smith has filed MIRR calculations for the Company's DSM and EE
 programs at both a system level and a North Carolina retail level of operations.
 Because of the consistency of the North Carolina retail allocation factors applied to
 each program's MIRR calculation inputs, the MIRRs calculated on a North Carolina
 retail basis are virtually equal to those calculated on a system basis.

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Second, the system level revenues, program costs, and net lost revenues used by
Mr. Smith in his calculations are consistent with the system amounts the Public Staff
believes are appropriate under the terms of the Agreement, subject to certain
adjustments that I will discuss later in this testimony and some immaterial
mathematical differences. However, the North Carolina retail amounts that Mr.
Smith has used differ from those the Public Staff believes are appropriate, due to
our disagreement regarding the appropriate North Carolina retail allocation factors.

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15 Third, the Public Staff disagrees with some of the inputs and methods that Mr. 16 Smith has used in the calculations of the MIRRs. The inputs and methods were 17 also used by the Company in its scenario MIRR calculations filed in the Response 18 to Initial Order, and have been previously addressed by the Public Staff in its 19 Comments filed on June 12, 2009. Because of the disagreement with the Company 20 on these inputs and methods, the Public Staff's MIRR calculations differ from those 21 of the Company.

1 Q. WOULD YOU ELABORATE ON THIS THIRD POINT? 2 Α. Yes. I specifically disagree with the following two characteristics of the Company's 3 June 26 MIRR calculations: 4 The inclusion of net lost revenues as a reduction in cash flows after the end (1) 5 of the 36-month limitation set forth in the Agreement on recovery of such net 6 lost revenues. 7 (2) The use of an 18-year investment period for every individual program and 8 grouping of programs for purposes of calculating the MIRR. 9 10 I am also concerned about the Company's classification of net lost revenues as a cash outflow, rather than a reduction in cash inflows. I will discuss each of these 11 12 disagreements and concerns below. 13 14 First, with regard to the Company's inclusion of net lost revenues in the MIRR 15 calculations, although per the Agreement net lost revenue recovery for measures 16 installed in each vintage year is limited to the first 36 months of net lost revenues 17 experienced. Duke has assumed that net lost revenues are incurred throughout the 18 life of each program. For the reasons set forth in my direct testimony<sup>4</sup> and further 19 explained its June 12, 2009 comments, the Public Staff believes that this

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assumption is inconsistent with the premise underlying the limitation of net lost

revenue recovery to 36 months, namely that net revenues lost as a result of EE or

DSM programs or, to be more specific, the impacts on the Company's earnings due

to such net lost revenues, do not continue in perpetuity. Thus, the Public Staff

believes that for the purpose of the MIRR calculations, net lost revenues reflected

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as a reduction in cash flows should be limited to the 36-month limitation on net lost revenue recovery agreed to by the Stipulating Parties.

4 Second, with regard to the Company's use of an 18-year investment period for each 5 program for purposes of the MIRR calculations, the Public Staff agrees that an 18vear period is appropriate for calculating the MIRR for the aggregate of all of the 6 7 programs set forth by the Company, because such a period reasonably represents 8 the overall length of the life of the first bundle of the Company's aggregate portfolio. 9 In measuring the MIRR for any individual program or group of programs with a 10 shorter life, however, the Public Staff believes that the life of the first bundle for that 11 particular program or group of programs should be used as the investment period. to more accurately set forth the MIRR for that particular program or grouping of 12 13 programs. By life, I mean the period over which that first bundle is estimated to 14 produce avoided cost benefits, subject to the four-year limitation placed on DSM 15 avoided cost benefits under the terms of the Agreement.

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Finally, with regard to whether net lost revenues should be treated as a cash outflow, as the Company has done, or as a reduction in cash inflows, I believe that credible arguments can be made for either perspective, depending on specific circumstances. However, one particular factor, in this proceeding at least, favors the reduction-in-cash-inflow treatment: the Agreement provides for dollar-for-dollar recovery of net lost revenues. This dollar-for-dollar recovery is consistent with using

the UCT and the TRC Test as the primary tests to determine whether DSM or EE 1 2 programs should be implemented. Neither of those tests recognizes net lost 3 revenues as a cost; they are, instead, essentially a "side effect" of implementing 4 certain programs that must be addressed to ensure that the utility is not unduly harmed by the implementation of a particular program. Since the "cure" for the 5 6 "side effect", the dollar-for-dollar recovery of reasonable net lost revenues, 7 essentially eliminates net lost revenues from the measurement of cash flows, the 8 Public Staff believes that treating net lost revenues as a reduction in cash inflows is more reasonable, thus essentially eliminating them from the MIRR calculation. 9

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Q. THE COMMENTS FILED BY THE PUBLIC STAFF ON JUNE 12 ALSO STATE
 THAT TRUNCATING THE MIRR CALCULATION FOR DSM PROGRAMS TO
 FOUR YEARS, AS DONE BY THE COMPANY, ARTIFICIALLY LOWERS THE
 MIRR PERCENTAGES FOR THOSE PROGRAMS. WHY HAVE YOU NOT
 RAISED THIS ISSUE WITH REGARD TO THE CALCULATIONS PERFORMED BY
 MR. SMITH?

A. The Public Staff's June 12, 2009 Comments specifically address the MIRR
calculations presented by the Company in its March 31, 2009 Response to Initial
Order. As of March 31, the Public Staff considered the Company's position to be
the same as it had initially filed in this proceeding: a Save-a-Watt cost revenue
calculation mechanism that would be put into place for an indefinite period.
However, the Agreement subsequently reached by the Stipulating Parties is for a

pilot program with a definite term of only four years; at the end of that term, the
 parties will essentially be back to square one with regard to the appropriate cost
 recovery and incentive mechanism. Therefore, the Public Staff does not consider
 limiting the MIRR calculation for the Company's proposed DSM programs to the
 term of the Agreement to be unreasonable.<sup>5</sup>

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7 Q. HAVE YOU PERFORMED MIRE CALCULATIONS THAT REFLECT THE PUBLIC
8 STAFF'S POSITIONS?

9 A. Yes. Maness Exhibit 3 sets forth the MIRRs calculated in accordance with the
10 Public Staff position regarding the amount of net lost revenues to be included and
11 the appropriate investment periods for each program, but with net lost revenues still
12 treated as a cash outflow. Maness Exhibit 4 sets forth MIRRs calculated in the
13 same manner, but with net lost revenues treated as a reduction in cash inflows, as
14 preferred by the Public Staff.

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16 Q. WHAT ARE THE RESULTS OF YOUR CALCULATIONS, AS COMPARED TO17 THOSE OF THE COMPANY?

18 A. The table below sets forth the MIRRs calculated by both the Company and the19 Public Staff:

<sup>&</sup>lt;sup>5</sup> If the term of the Agreement were longer, the Public Staff would likely recommend that the investment period for DSM programs be longer as well.

PROGRAM/GROUP	SMITH EXHIBIT 1	MANESS EXHIBIT 3	MANESS EXHIBIT 4
Residential Energy Assessments	5.6%	7.8%	8.3%
Residential Smart Saver – AC	2.5%	5.4%	4.7%
Residential Smart Saver – Energy Star	6.6%	10.6%	17.7%
LIEE / Weatherization Assistance	4.8%	6.6%	5.7%
EE Education Program for Schools	5.8%	8.6%	10.2%
Power Manager	12.1%	29.8%	29.8%
Total Residential	6.2%	8.2%	9.0%
Non-Residential Smart Saver - Lighting	6.0%	9.5%	11.1%
Non-Residential Smart Saver - Motors	6.0%	11.5%	14.3%
Non-Residential Smart Saver – Other Prescriptive	6.2%	9.6%	10.6%
Non-Residential Smart Saver – Food Service	5.7%	9.8%	11. <b>3%</b>
Non-Residential Smart Saver – HVAC	3.1%	5.7%	5.2%
Non-Residential Smart Saver – Custom Rebate	3.3%	5.3%	4.6%
Power Share	8.5%	12.2%	12.2%
Total Non-Residential	6.0%	8.3%	8.5%
Total Residential and Non-Residential	6.1%	. 8.2%	8.7%
Total EE	5.4%	7.9%	8.3%
Total DSM	10.0%	19.5%	19.5%

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# 3 Q. DOES THIS COMPLETE YOUR SUPPLEMENTAL TESTIMONY?

4 A, Yes.

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1	Q.	Mr. Maness, do you have a summary of your	
2		testimony?	
3	А.	I do.	
4	Q.	Will you please read it?	
5		(THE SUMMARY OF THE PREFILED SUPPLEMENTAL TESTIMON	NΥ
6		OF MICHAEL C. MANESS WILL BE COPIED INTO THE RECOM	RD
7		AS GIVEN ORALLY FROM THE WITNESS STAND.)	
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#### DUKE ENERGY CAROLINAS, LLC DOCKET NO. E-7, SUB 831

#### SUMMARY OF SUPPLEMENTAL TESTIMONY OF MICHAEL C. MANESS

The purpose of my supplemental testimony is to respond to the Commission's Settlement Hearing Order issued on June 18, 2009. In that Order, the Commission required both Duke and the Public Staff to file (a) Modified Internal Rate of Return (MIRR) analyses consistent with the terms of the Settlement Agreement filed on June 12, 2009, given their respective positions on the appropriate inputs to the MIRR calculations, and (b) testimony regarding the outstanding issue between the Stipulating Parties of the appropriate jurisdictional allocation method to use in determining the North Carolina retail demand-side management (DSM)/energy efficiency (EE) Rider. Duke Energy Carolinas and the Environmental Intervenors propose that the system revenue requirements for DSM and EE programs be allocated only to retail customers. The Public Staff instead proposes that system revenue requirements be allocated to the wholesale jurisdiction as well.

In his Settlement Testimony, Duke witness Stephen M. Farmer asserts that because Duke's proposed DSM and EE programs are directed specifically at its retail customers, it is appropriate to recover the costs of those programs only from those customers. Mr. Farmer testifies that this approach is more consistent with G.S. 62-133.9(e) than that of the Public Staff. However, G.S. 62-133.9(e) refers specifically to assignments of costs to customer classes; there is no language in the statute that refers to the methods to be used to allocate costs between jurisdictions for North Carolina retail ratemaking purposes. Furthermore, in paragraph (b)(1) of Commission Rule R8-69, the Commission refers to jurisdiction and class assignment as separate processes, and associates G.S. 62-133.9(e) only with class assignment. In the rulemaking proceeding that resulted in Rule R8-69, the Commission declined to indicate that the statute applied to jurisdictional allocation, and explicitly declined to require that the DSM and EE costs be recovered solely from retail customers.

The Public Staff believes that allocating costs only to the retail jurisdictions, as the Company proposes, does not reflect the system benefits that will arise from implementation of DSM and EE programs. The benefit of a DSM or EE program to the utility system is the long-term reduction in cost of service achieved by the utility as a result of it acquiring DSM and EE resources to serve load growth at a lower cost than would have been incurred had the utility instead been required to serve that load growth through acquisition of supply-side resources. This reduction in cost can typically be expected to accrue to the benefit of all system customers (although perhaps in varying amounts), because the costs themselves, if incurred, would be allocated to the entire system, including the wholesale jurisdiction. Since achieving those system benefits is the essential purpose of the DSM and EE programs, those benefits should also be the basis for determining which DSM and EE program costs and incentives are assigned or allocated to the North Carolina retail jurisdiction. The Public Staff believes that the appropriate and reasonable manner of allocating the costs and incentives reflected in the DSM/EE Rider is to treat them as total system costs, and allocate them across the total system, including the wholesale jurisdiction.

With regard to the allocation of North Carolina retail revenue requirements to customer groups (residential and non-residential), the Settlement Agreement provides that the appropriate allocation or assignment method to be used will be determined by the Commission in this proceeding. Company witness Farmer appears to assert that the issue in contention between the Company and the Public Staff relates to the topic of whether Duke should be allowed to implement just one non-residential rate, rather than separate rates for each of the individual non-residential customer classes. However, the Public Staff is not contesting that Company proposal; instead, the method of allocation to customer groups is the disputed issue. In that regard, the Public Staff believes that allocation of North Carolina retail DSM and EE revenue requirements to customer classes is, unlike jurisdictional allocation discussed above, controlled by G.S. 62-133.9(e). Based on the Public Staff's interpretation of that statute section, allocation of North Carolina retail DSM and EE revenue requirements to customer classes should be based on the same contribution to system peak load and system energy requirements methodology that it believes is appropriate for jurisdictional cost allocations.

Maness Exhibit 2, attached to my supplemental testimony, sets forth the estimated North Carolina retail residential and non-residential revenue requirements and DSM/EE riders for each of the four years of the settlement term, consistent with the Public Staff's recommendations regarding cost and incentive allocation.

With regard to MIRR calculations, during the initial hearing held in this proceeding. the Commission asked the Company to provide the internal rate of return it expected to achieve with respect to each DSM and EE program proposed in its application in this In response, Company witness Schultz filed, as Confidential Schultz subdocket. Supplemental Exhibit No. 1, MIRR calculations for each program, as well as for aggregate groupings of residential, non-residential, and total programs. Subsequently, on March 31, 2009, Duke filed a modified MIRR calculation for the case set forth in Confidential Schultz Supplemental Exhibit No. 1, as well as MIRR calculations for nine separate scenarios. These MIRR calculations reflected three significant departures from those presented previously: first, existing Interruptible Service (IS) and Standby Generation (SG) customers were excluded from the analysis, consistent with the provisions of the Commission's February 26, 2009 Order in this docket; (Initial Order); second, a single time period of 18 years was used as the investment period for each program and grouping of programs presented for each scenario; and third, the benefit and cost impacts of the Company's two DSM programs, Power Manager and Power Share, were truncated to four years.

In the Settlement Hearing Order, the Commission required both Duke and the Public Staff to file MIRR calculations to reflect the terms of the Agreement and their respective positions on how the MIRR calculations should be performed. Company witness Raiford L. Smith filed the Company's calculation of MIRRs consistent with the terms of the Agreement. These calculations continue to reflect the above-described modifications to

the calculations introduced in the Company's Response to Initial Order, and also include net lost revenues as a reduction in cash flows after the end of the 36-month limitation on recovery of such net lost revenues set forth in the Agreement. The Public Staff disagrees with some of the inputs and methods that Mr. Smith has used in the calculations of the MIRRs, specifically the inclusion of net lost revenues after the end of the 36-month limitation and the use of an 18-year investment period for every individual program and grouping of programs. I am also concerned about the Company's classification of net lost revenues as a cash outflow, rather than a reduction in cash inflows.

First, with regard to the Company's inclusion of net lost revenues in the MIRR calculations, Duke has assumed that net lost revenues are incurred throughout the life of each program. The Public Staff believes that this assumption is inconsistent with the premise underlying the limitation of net lost revenue recovery to 36 months, namely that net revenues lost as a result of EE or DSM programs do not continue in perpetuity. Second, with regard to the Company's use of an 18-year investment period for each program, the Public Staff agrees that an 18-year period is appropriate for calculating the MIRR for the aggregate of all of the programs set forth by the Company, because such a period reasonably represents the overall length of the life of the first bundle of the Company's aggregate portfolio. In measuring the MIRR for any individual program or group of programs with a shorter life, however, the Public Staff believes that the life of the first bundle for that particular program or group of programs should be used as the investment period. Finally, with regard to whether net lost revenues should be treated as a cash outflow or as a reduction in cash inflows, I believe that although credible arguments can be made for either perspective, the dollar-for-dollar recovery of net lost revenues provided for in the Settlement Agreement, because it essentially eliminates net lost revenues from the measurement of overall cash flows, makes it more reasonable to treat net lost revenues as a reduction in cash inflows for purposes of calculating an MIRR.

Maness Exhibit 3 sets forth the MIRRs calculated in accordance with the Public Staff position regarding the amount of net lost revenues to be included and the appropriate investment periods for each program, but with net lost revenues treated as a cash outflow. Maness Exhibit 4 sets forth MIRRs calculated in the same manner, but with net lost revenues treated as a reduction in cash inflows, as preferred by the Public Staff.

This completes my summary.

214 E-7, Sub 831 - Volume 1 MS. FENTRESS: Mr. Maness is available 1 2 for cross examination. CHAIRMAN FINLEY: Cross examination of 3 4 Mr. Maness by interveners? Mr. Green. 5 MR. GREEN: Yes. Thank you, Mr. Chairman. 6 7 CROSS EXAMINATION BY MR. GREEN: 8 Good afternoon, Mr. Maness. Q. 9 A. Good afternoon. 10 0. Looking at Section F of the Settlement Agreement, which is on page 21 of Schultz Exhibit B. 11 Α. Yes. 12 There's a table there under Section F that shows 13 0. 14 the earnings caps at different performance levels. 15 Is that correct? 16 Α. Yes, that's correct. 17 And at the 85 percent energy efficiency savings Q. 18 level the earnings cap is 12 percent, correct? 19 Α. Yes, that's correct. 20 Q. The earnings cap is going to be calculated on a 21 four-year basis, not an annual basis. Is that 22 correct? 23 Α. Yes. 24 Q. So rather than the earnings cap being calculated

215 E-7, Sub 831 - Volume 1 every year, it will be basically four years of 1 2 revenues received by the company divided by the 3 four years of the program costs? Α. There will be some net present value 4 Yes. 5 calculations involved to make sure that the dollars in each year are considered on an appropriately 6 7 equivalent basis. But in general, that's the concept. 8 9 That's the basic calculation? All right. Q. And the 10 four years of revenues used to calculate the earnings cap, 12 percent or whatever level it's 11 12 going to be at, will not include any net lost 13 revenues. Is that correct? 14 Α. The net lost revenues are considered to be 15 recovered on a dollar-for-dollar basis, so they --16 essentially, the recovery of those dollars and the net lost revenues themselves eliminate each other. 17 18 And so you're left with the revenue recovery 19 exclusive of net lost revenues to make the 20 calculation. 21 ο. You're -- in other words, you're describing the 22 Settlement Agreement as being net lost revenues are 23 considered both a cost and a revenue so they cancel each other out? 24

E-7, Sub 831 - Volume 1 Α. Well, there is a -- we do consider net lost 1 2 revenues as actually being incurred, and then there 3 is revenue that is recovered to compensate the Company for those losses. So they cancel each 4 5 other out, yes. So the first part of your answer, net lost revenues 6 0. 7 being incurred, treats them as a program cost. Is 8 that fair to say? Well, I don't think -- going back to my 9 Α. 10 recollection of the Commission rule making, I think 11 the Commission has indicated that the recovery of those is to be considered an incentive rather than 12 13 But we do, in fact, accept that certain of a cost. 14 the Company's programs will result in those lost 15 revenues. And that is a -- unless compensated, 16 would result in a reduction in the Company's 17 return. 18 May I approach the witness? MR. GREEN: 19 CHAIRMAN FINLEY: Yes, sir. 20 MR. GREEN: We'll mark this piece of 21 paper as Attorney General's Maness Cross 22 Examination Exhibit No. 1. 23 (ATTORNEY GENERAL'S MANESS CROSS EXAMINATION 24 EXHIBIT NO. 1 WAS MARKED FOR IDENTIFICATION.)

217E-7, Sub 831 - Volume 1 1 Q. Mr. Maness, this Cross Exam Exhibit No. 1 is a 2 response to a data request that was presented to 3 the Public Staff by the Attorney General's office. Is that correct? 4 Α. 5 Yes. And you made -- you provided this response to the 6 0. 7 data request. Is that correct? I prepared it. I don't recall whether I sent it 8 Α. 9 directly or had our attorney send that. But I did 10 prepare this, yes. 11 And the exhibit shows two columns of figures, one 0. 12 labeled Per the Settlement and the other labeled 13 Per Attorney General's Requested Calculation. The 14 amounts used in both columns are at present value 15 for the six years that Duke will receive these 16 amounts? Or was it four year? Well, yes, six years has -- has previously been 17 Α. discussed, although the term of the Settlement 18 19 Agreement and the mechanism that's been set up by 20 it is four years. There will be -- when you have 21 vintage year three and four, installations of 22 measures that caused net lost revenues, the 36 23 months for those installations will extend beyond 24 year four and, therefore, there are net lost

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revenues to be recovered in years five and six. Additionally, there will be a true-up, and application of the cap is appropriate as finalized, measured, and verified results become available. And some of that may also occur after the end of year four.

Looking at the second column in your prepared 7 0. 8 response, the one entitled Per Attorney General's 9 Requested Calculation, line number 12, labeled Net 10 Income as a Percentage of Program Costs -- is your 11 calculation of the Company's net income if net lost 12 revenues are included in the after tax earnings 13 calculation. Is that correct?

14 The 63.01 percent calculation reflects the recovery Α. 15 by the Company of dollars to compensate for net 16 lost revenues, but excludes the net lost revenues 17 themselves from reducing the Company's returns. 18 So another way of saying that is that it calculates Q. 19 the Company's net income including net lost 20 revenues?

A. Well, that could be another way to say it. I think
the Public Staff's concern with that calculation is
that the -- the entire premise for including the
amount of compensation on line 2 is, in fact, that

1		that amount of net lost revenue is actually
2		experienced. And so if you look at the Per
3		Settlement column, that is consistent with the
4		premise. But we don't think that the Attorney
5		General's requested calculation is consistent. If
6		we did not believe that the net lost revenues were
7		going to be experienced, we would not include the
8		amounts on line two as compensation for those.
9		Because, in the end, it's supposed to be a dollar-
10		for-dollar compensation.
11	Q.	Then looking at the first column, the Per
12	-	Settlement column, line 12 is your calculation of
13		the net income that Duke will receive if net lost
14		revenues are not included in the after tax earnings
15		calculation. Is that correct?
16	А.	Could you repeat that? I'm sorry.
17	Q.	Looking at the first column, labeled Per Settlement
18	**	
19	А.	Yes.
20	Q.	your line 12 is your calculation of the net
21	¥.	income that Duke will receive if net lost revenues
22		are not included in the after tax earnings
23		calculation?
24	Α.	Again, I would say that a little bit differently.

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It -- they include net lost revenues -- it includes net lost revenues in the calculation, but it also includes the compensation for net lost revenues and the two eliminate each other. So the mathematical result is the same as what you're describing, but the way you get there, the logic behind getting there is a little bit different.

8 Q. Well, essentially, the only two differences in the 9 tables in the calculations you're made is -- you 10 made is under the Per Settlement column you've 11 included under line two revenue required based on 12 net lost revenues at 164. -- almost 6 million in 13 both calculations, I mean both columns. Correct? 14 Α. Yes.

Q. All right. And then on line 5, net lost revenues
assumed to be experienced are included as a
deduction in the first column, but not under the
second column. Is that correct?

19 A. Yes, that's correct. And that goes to what I'm
20 saying, is that if in the end there was measurement
21 and verification and it somehow miraculously showed
22 that there were no net lost revenues, then the
23 Company would not recover the amount on line two.
24 MR. GREEN: All right. Thank you, Mr.

221E-7, Sub 831 - Volume 1 No further questions. 1 Maness. 2 CHAIRMAN FINLEY: Do any other 3 intervenors have questions for Mr. Maness? 4 (NO RESPONSE.) 5 CHAIRMAN FINLEY: Duke? 6 MS. HEIGEL: No questions, Mr. Chairman. 7 CHAIRMAN FINLEY: Redirect? 8 MS. FENTRESS: Just very briefly. 9 **REDIRECT EXAMINATION BY MS. FENTRESS:** 10 ο. Mr. Green and you had a conversation about net lost revenues being an incentive per the Commission's 11 12 rules. But you agree, I think you've said, net 13 lost revenues -- they act to make a company whole; 14 they act to replace revenues they've lost from 15 enacting an energy efficiency program. Would you 16 agree with that? 17 Α. The recovery of net lost revenues, yes. 18 Q. And so that is the incentive in the viewpoint of 19 the Public Staff. Would you agree? 20 Α. Yes. 21 Q. It is not, in our viewpoint, an incentive on top of 22 another incentive that the Commission might award 23 for implementing energy efficiency programs. Is 24 that correct?

222 E-7, Sub 831 - Volume 1 1 Α. That's correct. I think another way of saying that 2 is that without that net lost revenue compensation, 3 there would be a disincentive to proceed with those 4 types of programs. 5 MS. FENTRESS: Thank you. That's all I have. 6 7 CHAIRMAN FINLEY: Are there questions by the Commission of Mr. Maness? 8 9 (NO RESPONSE.) 10 CHAIRMAN FINLEY: Very well. Thank you, 11 Mr. Maness. 12 (WITNESS EXCUSED.) MS. FENTRESS: I'd like to move Mr. 13 14 Maness' exhibits attached to his supplementary 15 testimony and the verified responses into the 16 record. 17 They shall be received CHAIRMAN FINLEY: as evidence. 18 19 (MANESS SUPPLEMENTARY EXHIBITS AND VERIFIED 20 RESPONSES WERE ADMITTED INTO EVIDENCE.) CHAIRMAN FINLEY: Let me see counsel up 21 22 here just a moment. 23 MR. GREEN: Mr. Chairman, I'd like to 24 move the Attorney General's cross exam exhibits

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into evidence.
CHAIRMAN FINLEY: Attorney General's
Maness Cross Examination Exhibit No. 1 will be
entered into evidence.
(ATTORNEY GENERAL'S MANESS CROSS EXAMINATION
EXHIBIT NO. 1 WAS ADMITTED INTO EVIDENCE.)
(OFF-THE-RECORD DISCUSSION)
CHAIRMAN FINLEY: We will now take our
luncheon recess, and we will reconvene at two
o'clock.

STATE OF NORTH CAROLINA COUNTY OF WAKE

#### CERTIFICATE

I, Cynthia W. Rice, Notary Public/Court Reporter, do hereby certify that the foregoing hearing before the North Carolina Utilities Commission in Docket No. E-7, Sub 831 was taken and transcribed under my supervision; and that the foregoing pages numbered 1 through 224 constitute a true and accurate transcript of said Hearing.

I do further certify that I am not of counsel for, or in the employment of either of the parties to this action, nor am I interested in the results of this action.

IN WITNESS WHEREOF, I have hereunto subscribed my name this 31st day of August, 2009.

Cynthia W. Rice Notary Public No. 200602400090

# FILED

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Clerk's Office N.C. Utilities Commission,