#### BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

#### DOCKET NO. E-7, Sub 831

In re:	)	
Application of Duke Energy Carolinas, LLC	)	AGREEMENT AND
For Approval of Save-a-Watt Approach,	)	JOINT STIPULATION
Energy Efficiency Rider and Portfolio of	)	OF SETTLEMENT
Energy Efficiency Programs	)	
	)	

This Agreement and Joint Stipulation of Settlement (the "Settlement Agreement") is made by and between Duke Energy Carolinas, LLC ("Duke Energy Carolinas" or the "Company"), and Southern Alliance for Clean Energy, Environmental Defense Fund, Natural Resources Defense Council, and the Southern Environmental Law Center (collectively, the "Environmental Intervenors"), and the Public Staff of the North Carolina Utilities Commission ("Public Staff") together referred to herein as the Stipulating Parties.

#### **RECITALS**

WHEREAS, on May 7, 2007, Duke Energy Carolinas filed an Application for Approval of Save-a-Watt Approach, Energy Efficiency Rider and Portfolio of Energy Efficiency Programs (the "Energy Efficiency Plan") with the North Carolina Utilities Commission (the "Commission"). Exhibit A hereto sets forth a summary of the procedural history of this matter.

WHEREAS, the Stipulating Parties are parties of record in the above-captioned docket. The other parties of record in the above-captioned proceeding that are not parties to this Settlement Agreement are: Attorney General Roy Cooper; Carolina Industrial Group for Fair Utility Rates III; Wal-Mart Stores East, LP; Public Service Company of

North Carolina, Inc.; Carolina Utility Customers Association, Inc.; Air Products and Chemicals, Inc.; North Carolina Waste Awareness and Reduction Network, Inc.; Piedmont Natural Gas, Incorporated; Virginia Electric and Power Company d/b/a Dominion North Carolina Power; Progress Energy Carolinas, Inc.; North Carolina Sustainable Energy Association, Inc.; the City of Durham; and North Carolina Municipal Power Agency Number 1.

WHEREAS, after (1) the filing of testimony and exhibits; (2) participation in a fully litigated hearing; and (3) substantial discovery by, the Stipulating Parties, the Stipulating Parties have engaged in discussions to determine if a settlement of the issues would be in their best interests.

**WHEREAS**, the Stipulating Parties believe that a settlement that appropriately balances the interests of customers, the environment, and Duke Energy Carolinas would be in the public interest.

**NOW THEREFORE**, following their discussions, the Stipulating Parties have each determined that their interests and the public interest would best be served by settling issues pending in the above-captioned case under the terms and conditions set forth below:

#### **AGREEMENT**

1. This Settlement Agreement comprehensively resolves all issues between the Stipulating Parties associated with Docket No. E-7, Sub 831, including Duke Energy Carolinas' Energy Efficiency Plan and the Company's proposed compensation model, except for certain cost allocation issues set forth in Paragraphs H.8 and H.9 and certain interest rate determination issues set forth in Paragraphs H.4 and H.6 of Exhibit B to this

agreement, which the Stipulating Parties request the Commission to decide in this proceeding. The terms of the Settlement Agreement represent a fair, just and reasonable resolution of the issues as a result of negotiation and compromise by the Stipulating Parties.

- 2. This Settlement Agreement retains many important features of Duke Energy Carolinas' initial save-a-watt proposal, including:
  - Compensation to Duke Energy Carolinas for successful implementation of demand-side management and energy efficiency programs on the basis of a discount to the "avoided costs" of a power plant rather than on the basis of what the utility spends on demand-side management and energy efficiency programs;
  - Pay for performance. The Company's compensation is based exclusively
    upon actual demand-side management and energy efficiency savings
    achieved, measured and verified by an independent third party;
  - Duke Energy Carolinas remains at risk, based upon its actual performance, for recovery of its demand-side management and energy efficiency program costs, as well as any management incentive.
- 3. This Settlement Agreement incorporates a number of provisions that are important to the Environmental Intervenors, including:
  - Performance targets. Duke Energy Carolinas is eligible to receive a higher level of incentive based on how well it performs in achieving demand-side management and energy efficiency savings that result in bill savings for customers;

- Increased energy efficiency. Duke Energy Carolinas has increased the amount of energy efficiency avoided cost savings it will target to achieve for customers;
- Earnings caps. To protect consumers and encourage strong performance,
   Duke Energy Carolinas' earnings opportunity is capped at varying
   percentages of return on investment on program costs depending upon the
   Company's performance.
- 4. Along with certain of the provisions listed above, the Settlement Agreement also incorporates additional provisions that are important to the Public Staff, including:
  - Limited term pilot. The Company proposes the modified save-a-watt regulatory model as a four year limited term pilot, subject to the conditions contained in the Settlement Agreement. This four year pilot limits the exposure of the parties to unintended consequences that can sometimes occur with a new regulatory approach.
  - Limited incentive amounts. The Company's revenues recovered on the basis of percentages of avoided costs are limited to the amount necessary to produce an after-tax return on program costs between 5% and 15%, depending on its success in reaching a targeted aggregate energy efficiency and demand-side management avoided cost savings level. In addition, the amount of net lost revenues that the Company may recover is also limited to those incurred within 36 months of implementation of any particular measure and is offset by revenues from the Company's public

- utility operations that result in an increase in demand or consumption by customers.
- Transparency. The Settlement Agreement provides for the separate recovery of 36 months of net lost revenues, as defined by Commission Rule R8-68. As initially filed, the save-a-watt model did not provide for the transparent recovery of program costs, net lost revenues, and additional utility incentives through the rider.
- Locking in Avoided Cost. The Settlement Agreement shields ratepayers
  from the risk of tying revenue recovery for energy efficiency and demandside management programs to unknown and variable supply-side costs by
  locking in the per MWH and per MW-year avoided costs except as set
  forth in the Settlement Agreement.
- Revenue Cap. The Settlement Agreement shields ratepayers from the risk
  of overcollection by providing for the return, with interest, to them of any
  revenues collected in excess of what is allowed under the Settlement
  Agreement.
- 5. The Stipulating Parties agree to support this settlement in any evidence and proposed orders they submit to the Commission in this proceeding. To the extent that the testimony and exhibits of Duke Energy Carolinas previously submitted in this docket are inconsistent with the terms of this Settlement Agreement, Duke Energy Carolinas agrees to submit further testimony revising its previous position to make it clear that the Company supports this settlement.

- 6. As a compromise to positions advanced by Duke Energy Carolinas, Environmental Intervenors, and the Public Staff, the Stipulating Parties hereto agree to the settlement terms set forth in Exhibit B, attached hereto. Exhibit B is a term sheet that sets forth specific provisions of the settlement that are intended by the Stipulating Parties to resolve all pending issues relating to Docket No. E-7, Sub 831, except as set forth in Paragraphs H.4, H.6, H.8, and H.9 of Exhibit B. Exhibit B is incorporated herein by reference and constitutes the essential terms of the Stipulating Parties' agreement. The Settlement Agreement terms shall be effective upon approval by the Commission.
- 7. Attached hereto for information purposes only, as Exhibit C, is a chart summarizing (1) Duke Energy Carolinas' initial save-a-watt proposal, (2) the major issues raised by the Environmental Intervenors and the Public Staff in their testimony filed in this proceeding, and (3) how the Settlement Terms address those issues raised by the Environmental Intervenors and the Public Staff, resulting in a comprehensive compromise that forms the basis for this Settlement Agreement.
- 8. The Stipulating Parties shall jointly move to have this Agreement presented to and approved by the Commission.
- 9. This Settlement Agreement is solely the result of compromise in the settlement process.
- 10. The evidence presented by the Stipulating Parties in this proceeding, including testimony offered in support of the settlement, constitutes substantial evidence sufficient to support this Settlement Agreement and provides an adequate evidentiary basis upon which the Commission can make any findings of fact and conclusions of law necessary for the approval of this Settlement Agreement.

- 11. This Settlement Agreement shall be effective upon execution of the Stipulating Parties and shall be interpreted according to North Carolina law.
- 12. This Settlement Agreement shall bind and inure to the benefit of each of the signatories hereto and their representatives, predecessors, successors, assigns, agents, shareholders, officers, directors (in their individual and representative capacities), subsidiaries, affiliates, parent corporations, if any, joint ventures, heirs, executors, administrators, trustees, and attorneys.
- 13. This written Settlement Agreement contains the complete agreement of the Stipulating Parties with respect to issues associated with Docket No. E-7, Sub 831. The Stipulating Parties agree that by signing this Settlement Agreement, it will not constrain, inhibit or impair their arguments or positions held in other proceedings. Each Stipulating Party acknowledges its consent and agreement to this Settlement Agreement by authorizing its counsel to affix his or her signature to this document where indicated below. Counsel's signature represents his or her representation that his or her client has authorized the execution of the Settlement Agreement. Facsimile signatures and e-mail signatures shall be as effective as original signatures to bind any party. This document may be signed in counterparts, with the various signature pages combined with the body of the document constituting an original and provable copy of this Settlement Agreement.

The foregoing is agreed and stipulated to this day of June, 2009.

(Signature Pages Follow)

# Representing and binding Duke Energy Carolinas, LLC

By
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By				
-	 _	_	_	

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#### PROCEDURAL HISTORY

On May 7, 2007, Duke Energy Carolinas filed a petition in this docket proposing its Energy Efficiency Plan (the save-a-watt petition). By this filing, Duke Energy Carolinas requested approval of a new save-a-watt approach to energy efficiency (EE) programs; a portfolio of EE programs; and an EE rider (Rider EE) to compensate and reward it for verified energy efficiency results and to recover the amortization of, and a return on, 90% of the costs avoided by the save-a-watt approach. More specifically, Duke Energy Carolinas requested that the Commission, after hearing, issue an order approving (1) the implementation of the proposed save-a-watt approach for EE; (2) the portfolio of proposed EE programs; (3) the implementation of proposed Rider EE, including the proposed initial charges for customers; (4) the deferral of program costs and amortization of such costs over the life of the applicable program, with an acknowledgment that the revenues established in Rider EE based on avoided costs specifically include the recovery of incurred program costs; (5) the closing of designated existing programs; and (6) the proposed manner of accounting for the impacts of the save-a-watt approach in the Company's Quarterly Surveillance Reports (NCUC Form ES-1 Reports) to the Commission.

After receiving comments on how to proceed, the Commission issued an Order Consolidating Issues for Hearing, on August 2, 2007. Such Order consolidated the present save-a-watt docket with three pending dockets, Docket Nos. E-7, Subs 828 and 829 and Docket No. E-100, Sub 112, which the Commission had earlier consolidated to be heard as a general rate case. Save-a-watt was consolidated with the aforesaid dockets

because issues had been raised as to the Commission's jurisdiction to consider the save-awatt proposal outside the context of a general rate case. However, the Commission reserved the right to reconsider consolidation should changed circumstances make a different procedure more appropriate.

Circumstances in fact changed when Session Law 2007-397, Senate Bill 3 (SB 3) was enacted and became law on August 20, 2007. This legislation included provisions bearing on the Commission's authority to consider and authorize proposals such as the save-a-watt approach. The Commission therefore issued an Order Bifurcating Proceedings on August 31, 2007. In that Order, the present save-a-watt docket was bifurcated from the general rate case, except for certain specified issues which, although somewhat related to the save-a-watt petition, were more appropriately litigated in the rate case. The Order Bifurcating Proceedings further provided that, after completion of the rulemaking proceeding to implement SB 3, which was then pending in Docket No. E-100, Sub 113 (Rulemaking Docket), an order would be issued scheduling a hearing in 2008 to consider the merits of the save-a-watt petition. The general rate case was decided by an Order Approving Stipulation and Deciding Non-Settled Issues, dated December 20, 2007. That Order, among many other things, authorized an adjustable Existing DSM Program Rider (EDPR) and provided that the EDPR and Duke Energy Carolinas's Demand-Side Management (DSM) deferred account would be subject to modification or elimination in either the Rulemaking Docket or the current proceeding. The Rulemaking Docket was decided by an Order Adopting Final Rules, issued on February 29, 2008.

Interventions were filed and granted for the Environmental Defense Fund, Natural Resources Defense Council, Southern Alliance for Clean Energy, and Southern

Environmental Law Center (collectively, the Environmental Intervenors); North Carolina Justice Center, AARP, North Carolina Council of Churches, and Legal Aid of North Carolina (collectively, the Public Interest Intervenors); Carolina Utility Customers Association, Inc. (CUCA); Carolina Industrial Group for Fair Utility Rates III (CIGFUR); Piedmont Natural Gas Company, Inc. (Piedmont); North Carolina Waste Awareness & Reduction Network (NC WARN); Progress Energy Carolinas, Inc.; Dominion North Carolina Power; Public Service Company of North Carolina, Inc. (PSNC); North Carolina Sustainable Energy Association; City of Durham; Wal-Mart Stores East, LP; North Carolina Municipal Power Agency I; and Air Products and Chemicals, Inc. (Air Products). The intervention of the Attorney General was noted pursuant to G.S. 62-20, and the participation of the Public Staff was noted pursuant to G.S. 62-15. On February 29, 2008, the Commission issued an Order Scheduling Hearing in this matter. On April 4, 2008, Duke Energy Carolinas filed the direct testimony and exhibits of James E. Rogers, Ellen T. Ruff, Judah Rose, Jane Sadowsky, Charles J. Cicchetti, Theodore E. Schultz, Janice D. Hager, Richard G. Stevie, Nick Hall, Stephen M. Farmer, and J. Danny Wiles. On May 9, 2008, the Commission issued an Order Rescheduling Hearing and Extending Filing Deadlines. On June 24, 2008, the Environmental Intervenors filed the testimony of Brian M. Henderson and Donald Gilligan and the testimony and exhibits of J. Richard Hornby; the Public Interest Intervenors filed the testimony and exhibits of Roger D. Colton; Air Products filed the testimony of James Butz; CIGFUR filed the testimony and exhibits of Nicholas Phillips, Jr.; Wal-Mart Stores East, LP filed the testimony and exhibits of James T. Selecky; the Public Staff filed the testimony and exhibits of Richard F. Spellman, Michael C. Maness,

and Jack Floyd; CUCA filed the testimony of Kevin W. O'Donnell; and NC WARN filed the testimony of John O. Blackburn. The City of Durham filed comments on the same date that were received as a prehearing brief. On June 24, 2008, Duke Energy Carolinas filed a Request for Acceptance and Approval of Stipulation of Settlement with PSNC and a Motion for a Pre-Hearing Order. On June 26, 2008, Duke Energy Carolinas filed a similar Request and Motion in regard to its stipulation with Piedmont. On July 21, 2008, Duke Energy Carolinas filed the rebuttal testimony of Charles J. Cicchetti, Richard A. Morgan, Stephen M. Farmer, J. Danny Wiles, Richard G. Stevie, Judah Rose, Janice D. Hager, and Theodore E. Schultz. On August 18, 2008, NC WARN filed a Motion requesting that the Commission establish an independently administered energy efficiency program in North Carolina to be known as NC SAVE\$. On August 20, 2008, the Commission issued an Order opening a generic docket to consider the NC WARN proposal in Docket No. E-100, Sub 120. On December 2, 2008, the Commission issued an Order denying the motion.

This matter came on for an evidentiary hearing on July 28, 2008, as scheduled. The Commission took judicial notice of Docket Nos. E-100, Subs 109, 113, and 114. Progress Energy Carolinas, Inc., Dominion North Carolina Power, PSNC, North Carolina Sustainable Energy Association, and North Carolina Municipal Power Agency I did not participate in the hearing. The parties submitted briefs and/or proposed orders on October 7, 2008.

Proposed orders were submitted by Duke Energy Carolinas, the Public Staff, and the Public Interest Intervenors. Briefs were filed by Duke Energy Carolinas, the Public

Interest Intervenors, the Environmental Intervenors, CUCA, jointly by CIGFUR and Air Products (collectively, the CIGFUR Intervenors), NC WARN, and the Attorney General. On February 26, 2009, the Commission issued its Order and Errata Order, requiring in part for Duke Energy Carolinas to file additional information. Duke Energy Carolinas filed the requisite data on March 31, 2009. On April 29, 2009, the Attorney General requested an extension of time for parties to file comments on the data filed by Duke Energy Carolinas. The Commission granted the Attorney General's request on May 6, 2009, setting May 22, 2009 as the revised deadline for comments. On May 21, the Public Staff filed a motion seeking a further extension of time to May 29, 2009 for parties to file comments. On May 22, 2009, the Commission granted the Public Staff's request and extended the period for Duke Energy Carolinas to reply to any filed comments to June 19, 2009. NC WARN filed comments on May 26, 2009. On May 28, 2009. Public Staff and the Environmental Intervenors filed a joint motion for a third extension of time to June 8, 2009 for parties to file comments, which the Commission granted the same day. On June 8, Public Staff requested, and the Commission granted, a fourth extension of time to file comments by June 12, 2009. Duke Energy Carolinas' reply comments are due July 6, 2009.

#### **SETTLEMENT TERMS**

### A. Overview of Approach

- 1. The Modified Save-a-Watt Approach is a framework under which Duke Energy Carolinas ("the Company") will deliver energy efficiency and demand-side management programs to its customers and be compensated for successful programs. Under this approach, the Company will be compensated based on predetermined percentages of the Company's capacity- and energy- related "avoided cost," an estimate of the cost of supplying electricity. The Company will recover in revenues over a four year period, percentages of "avoided costs" associated with the verified impact of energy efficiency and demand-side management programs implemented over a four-year plan period. Through these revenues, the Company must recover the actual costs of programs, which includes marketing, implementing, and administering energy efficiency and demand-side management programs and impact evaluation studies. The Company assumes the risk that the percentage of avoided cost it retains may not cover all of the actual costs of programs or provide any additional financial incentive during the four-year period.
- 2. The Company will be paid percentages of its estimated energy and capacity-related avoided costs, as defined in Section D.3.a. for its planned energy efficiency and demand-side management programs starting in year 1 of the four-year plan. After the measurement and verification of actual energy and peak demand savings, the North Carolina Utilities Commission (the "Commission") will determine the final amount of this payment level that the Company may retain. This regulatory review will include a true-up process that considers the Company's actual performance in delivering demand-side management and energy efficiency reductions relative to the performance targets established in the Modified Save-a-Watt Approach.
- 3. The percentage of avoided costs that the Company may recover for verified reductions in energy use (MWh) and system capacity (MW) shall be set separately for demand-side management and energy efficiency programs, at levels that are estimated to result in aggregate earnings approximately equal to an earnings cap, assuming achievement of the maximum performance target set forth in Paragraph D.6. The percentage-of-avoided-cost payment levels approved by the Commission may be modified only as provided in Sections D.4 and D.5 of this Exhibit.
- 4. Reductions in energy use (MWh) resulting from energy efficiency programs may impair the Company's ability to recover sufficient revenues to cover its fixed costs. In the near term, the reduction in electricity sales resulting from energy

<sup>&</sup>lt;sup>1</sup> The terms "energy efficiency" and "demand-side management" are used herein consistent with the definitions in N.C. Gen. Stat. § 62-133.8.

efficiency programs will result in "net lost revenues," which present a financial disincentive to the Company to implement energy efficiency programs. To reduce this disincentive, the Company may recover a reasonable amount of net lost revenues resulting from its energy efficiency programs for a limited period of time. Recovery of net lost revenues will be separate from the percentage-of-avoided-cost payments. As explained further in Section G, net lost revenues are as defined in Commission Rule R8-68 and may be recovered for a period of 36 months for each vintage year, but recovery shall cease upon Commission approval of (a) an alternative recovery mechanism or (b) the implementation of new rates in a general rate case or comparable proceeding to the extent the rates approved are set to recover net lost revenues. A vintage year is the twelve month period in which a specific demand-side management or energy efficiency measure is installed for an individual participant or a group of participants.

5. Nothing in this agreement relieves the Company from its obligation to comply with Commission Rule R8-68 and R8-69.

#### B. Term

The term of the pilot Settlement Agreement and the Company's Energy Efficiency Plan shall be four years; however, cost recovery shall continue through year 6 as necessary to enforce its terms.

### C. Compensation for Results

1. The percentages of avoided costs retained by the Company to determine the revenues recovered, are set forth below:

Demand-Side Management % of Avoided Costs During 4-Year Term	Energy Efficiency % of Net Present Value ("NPV") of Avoided Costs
of Settlement	over Lives of Measures Installed during the 4-year term of the
	settlement
75%	50%

Revenue = Demand-Side Management: 75% of avoided capacity costs + Energy Efficiency: 50% of NPV of avoided energy costs + 50% of NPV of avoided capacity costs

2. The Company shall use the same values for per MWh and per MW for avoided costs rates when determining targeted avoided cost savings and actual avoided cost savings.

### D. Performance Targets for Energy Savings and for Customer Monetary Savings

1. The Company's earnings will depend on both its ability to achieve monetary savings for its customers, and the level of those savings relative to a performance

target. In this way, the Company will be compensated based on its actual performance in implementing energy efficiency and demand-side management programs that produce economic savings to customers. The proposed performance target is expressed as "total avoided cost savings," or in other words, the targeted monetary savings to customers.

2. The Company's performance target establishes a goal for producing total avoided cost savings (nominal dollars) as a result of energy efficiency and demand-side management programs implemented during the four-year plan. In comparison with the Company's original proposal, the performance target reflects a substantial increase in projected efficiency results.

The total avoided cost savings target will be calculated (in nominal dollars) based on the following principles and approach. This total avoided cost savings target is calculated to reflect the impact of both (a) energy efficiency programs in avoiding both electric energy usage by customers and acquisition of additional capacity resources by the Company to serve incremental load and (b) demand-side management programs in avoiding acquisition of additional capacity resources by the Company to serve incremental load. For purposes of this agreement, avoided cost savings related to energy efficiency programs incorporate savings through the entire life of measures installed during the 4 year term of the agreement; avoided cost savings related to demand-side management measures include only savings experienced during the same term.

3.

a. *Energy Efficiency* – The energy efficiency component is aimed at producing a forecasted amount of energy- and capacity-related avoided power production cost savings based on a set of programs that achieves a Four-year Energy Savings Target.

## Program Year Energy Savings

Vintage Year 1	0.31%
Vintage Year 2	0.34%
Vintage Year 3	0.50%
Vintage Year 4	0.75%

Energy Savings are the "first year" impacts of measures implemented in the respective Vintage Year measured as a percent of total North Carolina and South Carolina retail sales (MWh). Measures implemented in each vintage year are expected to continue to operate and produce energy savings throughout the term of this agreement. For example, the measures implemented in Vintage Year 1 and producing energy savings in settlement year 1 equal to 0.31% of settlement year 1 retail sales, are expected to continue to operate and produce comparable energy savings in each of the

remaining years during the term of this agreement. Thus, the overall energy savings percentage for each settlement year during the 4 year term is cumulative; which results in the energy savings percentage for the fourth year of the settlement being equal to the sum of the energy savings from all four of the vintage year measures operating in that year; namely 1.9% of retail sales forecast for Year 4.

In establishing the energy savings target (in reduced retail sales), each vintage year's energy savings goal was determined based on the Company's 2009 Spring Load Forecast and shall be adjusted only as provided in Section D.5 of this agreement. The Company may adjust the start date of Vintage Year 1 to align with its annual planning process and coordinate program data reporting for North Carolina and South Carolina. Vintage Year 1 may be more than 12 months as a result.

This energy savings (MWh) target is then converted to a sum of monetary savings that reflects the cost of energy and capacity avoided as a result of the energy efficiency measures, over the life of each measure. The resulting "avoided cost savings" is determined by multiplying the savings by year (MWh and MW) by the full avoided cost (\$/MWh and \$/MWyear), which includes generation capacity, fuel, and fixed and variable operations and maintenance savings.

In establishing the target amount of "avoided cost savings" for each year, the avoided energy costs and avoided capacity costs (\$/MWh and \$/MW-Year) shall be those in effect at the time the proposal is approved by the Commission. The avoided per MWh and MW-Year energy and capacity costs shall be adjusted only as provided in Section D.4 of this agreement. These avoided per MWh and MW-Year energy and capacity costs shall be used in association with the programs proposed by Duke Energy Carolinas in its original proposal and with new programs filed for approval.

- b. Demand-Side Management The target amount of capacity savings and "avoided cost savings dollars" for the demand-side management component will be calculated based on an assumed amount of capacity (MW-Year) avoided through the demand-side management programs proposed by the Company and the avoided costs in effect at the time this agreement is approved by the Commission. The avoided per MW-Year avoided capacity costs used to calculate the target may only be adjusted as provided in Section D.4. The assumed capacity avoided (MW) target may only be adjusted as provided in Section D.5.
- 4. To address any concern that the avoided-cost savings target could be met merely through an increase in per MWh and per MW-Year avoided energy costs and capacity costs rather than through energy and capacity savings, the per MWh and per MW-Year avoided energy costs and avoided capacity costs will be fixed at the

outset of the plan for its four-year term. If the Company's combined avoided energy and capacity costs increase or decrease by more than 25%, due to changes in the per MWh and per MW-Year avoided energy or capacity costs, the programs may be re-analyzed to determine whether a modification of the portfolio of programs is warranted to maximize cost-effectiveness. Based on the re-analysis, the Company or any of the Stipulating Parties may request the Commission to allow a revision to its percentage-of-avoided-cost payment levels, avoided costs (in \$/MW and \$/MWh), and avoided cost savings target (in total dollars) following the appropriate methods as described in this agreement. Any revisions to rates and targets proposed by the Company shall be consistent with the underlying basis described in Section D (*i.e.*, the four-year Energy Savings Target and the anticipated participation rate in demand-side management programs).

- 5. To the extent that industrial and large commercial customers exercise any legal option to "opt out" of the plan, the forecasted retail sales and the anticipated participation rate in demand-side management and energy efficiency programs will be adjusted. The initial calculation of an avoided cost savings target and avoided cost percentages assume that all customers eligible to participate in Company programs will do so and that factors beyond the Company's control will not significantly limit participation by eligible customers. The right to opt out of participation in (and payment for) energy efficiency and demand-side management programs may undermine the Company's ability to achieve the performance targets. To adjust for this factor, the Company's avoided cost savings target (in total dollars) will be reduced to compensate for customers who choose to opt out. As the market is reduced by those customers who opt out (i.e., less MW and MWh available for demand-side management and energy efficiency), the targets will be reduced to maintain the same market penetration rate. Consistent with the Commission Rule R8-69(d)(2), 90 days after the approval of this agreement, the Company shall provide the Stipulating Parties and the Commission with notification of those industrial and large commercial customers that have opted out of participating in the new demand-side management and energy efficiency measures for which the Company seeks cost and incentive recovery. The Company will reconcile that list of customers opting out with any reductions in the avoided cost savings target at the annual participation true-up.
- 6. The Company's avoided cost target is \$754 million (nominal system dollars) based on programs implemented during the four-year term of this agreement and is tied to the following targeted MW and cumulative MWh savings:

System Portfolio Impacts					
100% Participation					
Year	1	2	3	4	Beyond Year 4
MWh	234,132	490,634	872,548	1,439,742	6,833,078
MW	368	548	736	844	259

7. The targets set forth above assume 100% participation.

#### **E.** Long Term Performance Goals

In addition to the four-year performance target set forth in Section D above, the Company intends to pursue all cost-effective energy efficiency and to commit to an overall energy efficiency target to achieve on-going annual electricity savings resulting from the Company's energy efficiency programs of at least 1% of 2009 weather-normalized retail electricity kWh sales by 2015 (*i.e.*, 1% kWh savings in 2015 and an additional 1% in 2016, to total 2% of weather-normalized retail electricity kWh sales in 2016, and so on), with savings each year over the 2009-2014 period ramping up to this incremental 1% per year target. The ability to ramp up to this goal will give the Company time to develop and expand its energy efficiency program offerings. Program cost-effectiveness will be determined using the Utility Cost Test.

#### F. Earnings Cap

1. Under the modified save-a-watt approach, the Company only gets paid for the actual energy and peak demand reductions delivered. Any incentive earned by the Company will depend on the Company's ability to achieve actual savings on behalf of customers.

The earnings to the Company that result from the incentive compensation will be capped at a percentage of incurred program costs. The specific percentage applied to programs costs to determine the earnings cap will be based on the percentage of the target avoided cost savings (as discussed in Section D) actually achieved, as set out in the table below.

The performance targets and earnings caps are related as follows:

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

"Target" reflects the total amount of anticipated monetary savings set forth in Section D. "Earnings" shall be calculated as an after-tax rate of return on actual program costs incurred by the Company over the four-year plan period on a net present value basis.

2. No more than 35% of the target may be met by demand-side management programs. Although the Company may pursue more demand-side management programs that exceed the 35% cap, any avoided cost savings resulting from demand-side management programs representing over 35% of the target will not

- count towards the achievement of the performance target for purposes of the earnings cap determination and calculations.
- 3. At the end of the four-year plan period, the Company's earnings shall be calculated on a net present value basis measured as of the beginning of year one of this agreement. To the extent that Company earnings for its entire portfolio of programs exceed the capped earnings level set out above, such excess earnings shall be refunded to customers with interest, at a rate to be determined by the Commission.

#### G. Net Lost Revenues

- 1. Net lost revenues mean revenue losses, net of marginal costs avoided at the time of the lost kilowatt-hour sale(s) incurred by the Company's public utility operations as the result of a new demand-side management or energy efficiency measure. Net lost revenues shall also be net of any increases in revenues resulting from any activity by the Company's public utility operations that cause a customer to increase demand or energy consumption, whether or not that activity has been approved pursuant to R8-68. When authorized by Commission Rule R8-69, net lost revenues shall be recovered for 36 months for each vintage year, except that the recovery of net lost revenue will end upon Commission approval of (1) an alternative recovery mechanism, or (2) the implementation of new rates in a general rate case or comparable proceeding to the extent that rates set in a rate case or comparable proceeding are set to explicitly or implicitly recover those net lost revenues
- 2. The estimated net lost revenues for the four-year plan are:

Net Lost Revenues By Vintage							
Estimated based on 85% Achievement, 3-year term, 4	vintages, Inc	cludes Gros	s Receipts &	& regulatory	fee		
North Carolina Only	1	2	3	4	5	6	Sum Total
First Year Vintage	\$7.7	\$7.9	\$8.0				\$23.6
Second Year Vintage		\$8.6	\$8.8	\$8.9			\$26.4
Third Year Vintage			\$13.1	\$13.5	\$13.5		\$40.1
Fourth Year Vintage				\$20.0	\$20.4	\$20.5	\$60.9
Total	\$7.7	\$16.5	\$29.9	\$42.3	\$33.9	\$20.5	\$151.0

#### H. Revenue Requirements and True-Up Process

1. This proposal is designed to recover the Company's full revenue requirements during the four-year term of the plan, with the exception of any outstanding balance of net lost revenues to be collected by the Company or revenue credit to be refunded to the customers.

- 2. The revenue requirement will not be increased through the addition of avoided transmission and distribution costs through the term of the agreement. The transmission and distribution avoided costs component is omitted from this agreement.
- 3. The estimated revenue requirements for the four-year term of this agreement are projected to be:

Total Revenue Requirements							
•	0 M D:-	In a first Dance					
Based on 85% Achievement, \$ in Millions, Residential & Non-Residential Revenue requirements,							
Includes gross receipts tax & regulatory fee, Revenues	do not inclu	de possible	true up				
North Carolina Only	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	Sum Total
Estimated Revenues at 100% Achievement	\$36.9	\$46.2	\$72.3	\$101.3	\$0.0	\$0.0	
Estimated Revenues at 85% Achievement	\$31.4	\$39.3	\$61.5	\$86.1	\$0.0	\$0.0	\$218.2
Rate \$/kWh	\$0.00059	\$0.00073	\$0.00112	\$0.00160	\$0.00000	\$0.00000	
Rate Change (based on 2008 rev)	0.8%	1.0%	1.6%	2.3%	0.0%	0.0%	
Estimated Net Lost Revenues at 100% Achievement	\$9.1	\$19.4	\$35.2	\$49.8	\$39.9	\$24.1	
Estimated Net Lost Revenues at 85% Achievement	\$7.7	\$16.5	\$29.9	\$42.3	\$33.9	\$20.5	\$151.0
Rate \$/kWh	\$0.00014	\$0.00031	\$0.00055	\$0.00078	\$0.00063	\$0.00038	
Rate Change (based on 2008 rev)	0.2%	0.4%	0.8%	1.1%	0.9%	0.5%	
Total Revenue Requirement at 85% Acheivment	\$39.1	\$55.8	\$91.4	\$128.4	\$33.9	\$20.5	\$369.2
Rate \$/kWh	\$0.00073	\$0.00103	\$0.00167	\$0.00238	\$0.00063	\$0.00038	
Rate Change (based on 2008 rev)	1.0%	1.5%	2.4%	3.4%	0.9%	0.5%	

- 4. An annual true-up process will be conducted to update revenue requirements based on actual customer participation results. Revenues will be collected from customers based on the annual participation true-up results plus an updated forecast of customer participation to the energy efficiency plan. The assumed level of avoided cost savings achievement will be determined under the provisions of Section H.4. Any overcollection resulting from a difference between amounts billed and amounts due the Company will be returned to the customers with interest, at a rate to be determined by the Commission in the first annual true-up proceeding in which an overcollection occurs.
- 5. Revenues collection from customers during the term of the agreement shall be based on the expected avoided costs to be achieved during the four-year term at an 85% level of achievement of the avoided cost savings target. The revenue requirement will be trued up to actual results at the end of the agreement. Any of the Stipulating Parties may, in a rider proceeding during the term of this agreement, recommend that the percentage achievement level be modified prospectively based on the actual level of achievement, in order to minimize the over-or under-collection of revenues at the end of the term.
- 6. A final true-up process based on measured and verified results will take place after the evaluation of the program results when the four-year period is complete. Any difference between amounts billed customers or amounts due the Company shall be returned to customers with interest, at a rate to be determined by the

Commission in the first such true-up proceeding in which an overcollection occurs.

- 7. Net lost revenues are included in the final true-up process at the end of the fouryear plan. The outstanding balance of net lost revenues will be adjusted based on actual measured and verified lost revenues.
- 8. The North Carolina retail revenue requirement applicable to demand-side 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 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.

9. Within the North Carolina retail jurisdiction, customer group revenue requirements applicable to demand-side management and energy efficiency programs will be determined by assigning or allocating the North Carolina retail revenue requirement to the various customer groups. The appropriate allocation or assignment method to be used for these purposes will be determined by the Commission in this proceeding.

### I. Measurement & Verification

1. Measurement and verification (M&V) of programs, conducted by an independent third-party using a nationally-recognized protocol, will be performed to ensure programs remain cost-effective. This protocol may be modified with approval of the North Carolina Utilities Commission to reflect evolution of best practices.

- 2. The results of the M&V process at the end of the term will be used to determine the actual energy (MWh) and capacity (MW) savings achieved. The M&V study shall be submitted to the Commission as part of the four-year true-up proceeding.
- 3. The measurement of units (*e.g.*, number of lights or HVAC units installed, capacity under contract, etc.) multiplied by the achieved kW and kWh savings from each unit as determined in the M&V process, will determine the actual MW and MWh achievements during the term of the plan.
- 4. In addition to updating the estimated energy and capacity savings, the M&V study will also update the free ridership estimates for programs and measures. All the updated information will be used in evaluating the continued cost-effectiveness of existing programs, but updates to free ridership estimates will not be applied retrospectively to measures that have already been installed or programs already completed. The initial estimates of load impacts and free ridership (gross to net) will be utilized up until the first set of impact evaluations is completed. The results from those impact evaluation studies will then be used prospectively until the next set is completed. If it becomes apparent during the implementation of a program that free ridership is substantially higher than anticipated, the Company will file appropriate program adjustments with the Commission.
- 5. The final true-up process will be based on changes in participation combined with verified MW and MWh savings as set forth above.

#### J. Program Management

- 1. To achieve maximum results, the Company will continuously monitor the portfolio of energy efficiency programs, and periodically modify the portfolio and/or programs in order to make the programs more successful, more cost-effective, and/or responsive to market conditions.
- 2. Consistent with the North Carolina Utilities Commission's February 26, 2009 Order in this docket, the Company will submit all new programs and major program modifications to the Commission for approval.
- 3. The Company will make residential programs available to customers without regard to whether they own or rent their home.
- 4. The Company will continue to pursue partnerships with third party agencies to help implement programs, including partnerships offering assistance to low income households. Upon approval of its programs, the Company will convene the Advisory Group (discussed in Section K, below) to guide efforts to expand cost-effective programs for low-income customers.

5. The Company will seek to leverage available state and federal funds to operate effective efficiency programs. Its application for such funds will be transparent with respect to the cost, operation and profitability of programs operated with those funds in a manner consistent with its authorized revenue recovery mechanism. Use of such funds helps offset the customer's project costs and are supplemental to Duke Energy's incentives to customers. As such, these funds will not change the impacts or cost-effectiveness of Duke Energy Carolinas' programs. Further, the amount of avoided costs recognized by the Company will not be reduced if customers also use state or federal funds to offset any portion of their project costs.

#### K. Regional Efficiency Advisory Group

- 1. The Company will work with stakeholders to develop a regional efficiency advisory group that may be broadened to include other utilities in the Carolinas. At a minimum, this advisory group will exist to cover a four-year program, including subsequent M&V activities. The advisory group will meet at least twice a year and may establish working groups on specific topics.
- 2. The advisory group will be comprised of a broad spectrum of regional stakeholders that represent a balanced interest in the program and its impacts, as well as national energy efficiency advocates and experts. A third party will facilitate the discussions. The advisory group will determine its own rules of operation, including the process for setting the agendas and activities of the group, consistent with these terms. Members agree to participate in the advisory group in good faith consistent with mutually-agreed upon rules of participation. Meetings will be open to additional parties who agree to the participation rules.
- 3. The role of the advisory group is to collaborate on new program ideas, review modifications to existing programs, ensure an accurate public understanding of the programs and funding, and review the M&V process.
  - a. The advisory group will review periodic status reports on program progress, collaborate on new program ideas, review modifications to existing programs, help set M&V priorities, provide recommendations for the submission applications to revise or extend programs and rate structures, and participate in the selection of the independent third party or parties that will conduct M&V of the programs.
  - b. The advisory group will review Duke Energy Carolinas' annual program report prior to its submission.
  - c. The advisory group will review any proposed adjustments in overall program targets that may be suggested as a result of factors outside the Company's control.

- d. The advisory group will evaluate and support appropriate strengthening of state building efficiency codes and state appliance efficiency standards, as well as any other state efficiency-related policies that may be encouraged or required by federal law.
- 4. Duke Energy Carolinas will provide information related to the development of energy efficiency and demand-side management programs to stakeholders in a transparent manner. The Company agrees to disclose program-related data at a level of detail similar to that which it has disclosed in other states or to data disclosed by other regulated utilities in the Carolinas. The Company will share all aspects of the development and evaluation of programs including the M&V process.
- 5. At its discretion, the Company may require confidentiality agreements with members who wish to review confidential avoided cost data or any calculations that could be used to determine the avoided cost data. Disclosure of this data would harm Duke Energy Carolinas competitively and could result in financial harm to its customers.
- 6. Participation in the advisory group shall not preclude any party from participating in any utility commission proceedings.

# Duke Energy Carolinas / Environmental Intervenors / Public Staff Save-A-Watt Settlement

Provision	Exhibit B Reference	Save-a-Watt as proposed by DEC in Initial Filing	Environmental Intervenors & Public Staff Concerns / Recommendations	Resulting Compromise / Save-A-Watt Settlement Agreement Provisions
Term	В	No definitive term, but proposal included a 4-year term of programs.	Because of the unique nature of the save-a- watt compensation mechanism, the model should be re-evaluated at the end of 4 years.	4 year pilot program (with true-up, etc. extending beyond as necessary).  A full review of the save-a-watt model will occur in year 5.
Avoided Cost- Based Compensation to Duke for Results	C	Energy Efficiency: 90% of actual (independently measured & verified) avoided costs achieved.	As a value-of-service framework, the avoided cost framework proposed by the Company had unnecessarily high revenue requirements, a financial incentive to focus on demand response and peak shaving programs, and less incentive to avoid construction of new base load generation.	Separate avoided cost percentages for demand-side management and energy efficiency programs to make the Company indifferent relative to profitability.  A cost-based earnings cap ensures that the framework has a strong cost-of-service element but with a novel value-based guarantee not typically offered by utilities.  50% of actual (independently measured & verified) NPV avoided capacity and energy costs achieved, subject to an earnings cap (described below).
	С	<b>Demand-Side Management</b> : 90% of actual (independently measured & verified) avoided costs achieved.		75% of actual (independently measured & verified) avoided capacity costs achieved, subject to an earnings cap (described below).
Included Elements in Avoided Cost- Based Compensation	A, D, G	Program costs, "lost revenues," and management incentive – all at risk, based upon achievement of actual, verified results	See discussion of "net lost revenues" below.	Program costs and management incentive - both at risk, based upon achievement of actual, independently verified results.  "Net lost revenues" (for energy conservation programs only) broken out and dealt with separately, (as described below).

Avoided Cost Calculation	D	Demand: Based on Avoided Cost rate filed with NCUC (i.e., "peaker methodology")  Energy: Based on avoided energy costs, per IRP	None.	Based on PURPA avoided capacity cost rates filed with NCUC, using 1.2 performance adjustment factor. The avoided capacity rate will be set for 4 years.  Based on avoided energy costs per IRP, using comparable methodology as
Earnings Caps	F	No explicit performance targets; implicit within "pay for performance" nature of avoided cost revenue stream.	Duke Energy Carolinas' proposal provides the utility with an opportunity for an uncapped return on investment that is unreasonably high when compared to other	applied in PURPA avoided energy cost rates approved by NCUC.  Based on targeted plan savings, earnings cap varies based upon performance level achieved as percent of target (see below)
		No earnings caps.	utilities.  Duke Energy Carolinas' shareholder incentives should be tiered based upon actual results. <sup>2</sup>	% Target       CAP         ≥ 90-100%       15% cap on return on program costs         80-89%       12% cap on return on program costs         60-79%       9% cap on return on program costs         <60%       5% cap on return on program costs         *Energy efficiency – savings considered over life of measure, e.g., HVAC has 15 yrs of savings         *Demand-side management – savings are annual
Initial Revenue	Н	Based on 90% of estimated avoided costs at 100% achievement, "shaped" to	The Company's proposal to reshape revenues is unnecessarily complex. The	Based on 4-year plan to create \$754 million in (nominal) avoided costs at
Requirements Calculation		resemble power plant investment and recovery.	Company should base revenues on contemporaneous estimates of avoided costs.	100% achievement level; no "reshaping" of revenue requirements.

<sup>&</sup>lt;sup>2</sup> While the Public Staff is not opposed to shareholder incentives being tiered based upon the actual results of demand-side management and energy efficiency programs, it does not share this concern with regard to this proceeding.

True Up	Н	Annual, with adjustment to revenue requirements based on actual compared to targeted avoided cost savings.  Over collections refunded to customers with 0% interest.	If the Company overcollects, the Company, not customers, would receive the time value benefit of the overcollections.	True-up at conclusion of 4-year period, based on actual compared to targeted avoided cost savings, in conjunction with performance targets and earnings caps.  The Company will pay interest on overcollections at an interest rate to be determined during the first true-up that shows a balance owing to customers.
Cost Recovery Period	A, B, H	20 years based on life of measure with recovery of and on avoided cost	See discussion of limited term above.	6 years: (4 + true up in year 5) for recovery of avoided cost and full 6 years for recovery of net lost revenues.

"Net Lost Revenue" Recovery Mechanism (loss attributable to fixed cost recovery, for energy efficiency programs only)	A, G	No explicit lost revenue recovery proposed.	The Environmental Intervenors are concerned that the Company's save-a-watt proposal does not explicitly address lost revenues, accounting for them instead in the avoided cost revenue recovery. This would bias the Company in favor of demand-side management programs and against energy efficiency programs. Also, following a rate case, rates for vintage years prior to base rate could be unaffected, and continue to collect net lost revenues.  The Public Staff is concerned about the lack of transparency caused by no provision for explicit net lost revenue recovery. Because save-a-watt revenue would be based simply on a percentage of avoided costs, it would not be readily evident what portions of the revenues were being utilized to compensate the Company for program costs, net lost revenues, and bonus incentives. The Public Staff also believes that any loss to the Company due to net lost revenues is transitory, and can be eliminated over time by increased growth in electricity usage, increased numbers of customers, achievements of cost efficiencies, reductions in the cost of capital, or a general rate case.	Direct recovery of net lost revenues as defined and set forth in Commission Rule R8-68 resulting from energy efficiency programs for 3 (vintage) years.  Net lost revenue recovery mechanism terminated prior to 36 months if/when Commission approves an alternative recovery mechanism or the implementation of new rates in a general rate case or other comparable proceeding to the extent that the rates are set to explicitly or implicitly recover net lost revenues.
Stakeholder Input	К		The stakeholder advisory group structure is not sufficient to assure adequate input or transparency.	Greater transparency and details regarding the structure of the stakeholder advisory group are guaranteed. The possibility of a two-state, multi-utility structure is suggested to improve participation and reduce costs.

Performance Targets	D		The proposal does not include ambitious enough programs or performance targets.	The program establishes increased performance targets, approximately doubling to 0.5% in the third year and 0.75% in the fourth year.
Cost Allocation	Н	The Company proposed that only retail customers would pay for the costs and benefits associated with demand-side management and energy efficiency programs. Under the original filing, Duke Energy Carolinas proposed that residential customers pay for programs available to residential customers and non-residential customers pay for programs available to non-residential customers.	With regard to jurisdictional cost allocation, the Environmental Intervenors and the Company's proposal is consistent with the Company's original petition, with one exception: instead of allocating demand-side management programs on kWh sales, Duke and the Environmental Intervenors propose to make the jurisdictional allocation based on contribution to peak demand.  The Public Staff does not accept the Company's cost allocation methodology. Consistent with its previously filed testimony in this proceeding, the Public Staff proposes that the costs and benefits of demand-side management and energy efficiency programs be allocated to both wholesale and retail customers.	This issue is unresolved and will be presented to the Commission for determination in this proceeding. Likewise, the appropriate allocation method for assigning costs to customer classes will be determined in this proceeding.