



Lawrence B. Somers
Deputy General Counsel

Mailing Address:
PEB 20 / P.O. Box 1551
Raleigh, NC 27602

o: 919.546.6722
f: 919.546.2694

bo.somers@duke-energy.com

FILED

JUL 01 2013

Clerk's Office
N.C. Utilities Commission

July 1, 2013

OFFICIAL COPY

VIA HAND DELIVERY

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

**RE: Duke Energy Carolinas' 2008 Revised REPS Compliance Plan and
Duke Energy Progress' 2012 Revised REPS Compliance Plan
Docket No. E-100, Sub 137**

Dear Ms. Mount:

Pursuant to the Commission's June 3, 2013 *Order Granting in Part and Denying in Part Motion for Disclosure* (the "June 3, 2013 Order"), I enclose an original and thirty-one (31) copies of Duke Energy Carolinas, LLC's ("DEC") revised 2008 Renewable Energy and Energy Efficiency Portfolio Standard ("REPS") Compliance Plan and Duke Energy Progress, Inc.'s ("DEP") revised 2012 REPS Compliance Plans, for filing in connection with the referenced matter.

The June 3, 2013 Order accepted DEC's offer and required DEC to revise the 2008 REPS Compliance Plan (filed in Docket No. E-100, Sub 118) to disclose information originally filed under seal as confidential, subject to prohibitions in its contracts and after redacting the names of counterparties. DEC has made the necessary notifications and revised its 2008 REPS Compliance Plan accordingly.

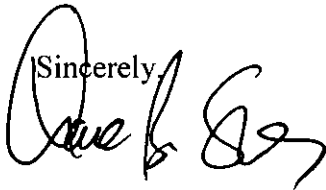
The June 3, 2013 Order required DEP to revise the 2012 REPS Compliance Plan filed in this docket, to publicly disclose certain information that was filed as public in its 2008 and 2010 REPS Compliance Plans, but originally filed under seal as part of its 2012 REPS Compliance Plan. Other information contained in the DEP 2012 REPS Compliance Plan continues to remain confidential, however, as determined by the Commission, and DEP renews its earlier request to treat this information confidentially pursuant to N.C. Gen. Stat. § 132-1.2. The redacted information contains names of

RR
AG
7 Comm
Watson
Green
Conrad
Duffley
Hoover
Sessoms
Kite
Hilburn
Ericson
Jones
Hodge
PS Exec Dir
3. PS Legal
3. PS Acct
3. PS Elec
2. PS Ec/Rs

counterparties with whom DEP has contracted for Renewable Energy Certificates ("RECs") as well as the prices and number of RECs. Public disclosure of this information would harm DEP's ability to negotiate and procure cost-effective purchases and discourage potential bidders from participating in requests for proposals.

During the review process, it has come to our attention that the DEP 2012 REPS Compliance Plan contained a typographical error on page D-11: the first publicly available contract term was incorrectly listed as "20 years" rather than "10 years." That information has been corrected on both the public and confidential versions filed.

For filing purposes, I also enclose one original and one copy with the confidential information redacted. Thank you for your attention to this matter. If you have any questions, please let me know.

Sincerely,


Lawrence B. Somers

Enclosures

cc: Parties of Record

CERTIFICATE OF SERVICE

I, certify that a copy of Duke Energy Carolinas, LLC's Revised 2008 REPS Compliance Plan and Duke Energy Progress, Inc.'s Revised 2012 REPS Compliance Plan in Docket No. E-100, Sub 137, has been served by electronic mail, hand delivery or by depositing a copy in the United States mail, postage prepaid to the following parties for record:

Margaret A. Force
Assistant Attorney General
PO Box 629
Raleigh, NC 27602-0629
pforce@ncdoj.gov

Ralph McDonald
Bailey & Dixon, LLP
PO Box 1351
Raleigh, NC 27602-1351
rmcdonald@bdixon.com

Sharon Miller
Carolina Utility Customer Association, Inc
1708 Trawick Road, Suite 210
Raleigh, NC 27604
smiller@cucainc.org

Robert Page
Crisp, Page & Currin, LLP
410 Barrett Dr. Suite 205
Raleigh, NC 27609-6622
rpage@cpclaw.com

W. Mark Griffith
Electricities of North Carolina
1427 Meadow Wood Blvd
Raleigh, NC 27604
mgriffith@electricities.org

H. Lawrence Armstrong, Jr.
Armstrong Law, PLLC
PO Box 187
Enfield, NC 27823
hla@hlalaw.net

Damon E. Xenopoulos
Brickfield, Burchette, Ritts, & Stone, PC
1025 Thomas Jefferson St, NW
Washington DC 20007
dex@bbrslaw.com

City Manager
City of Concord
PO Box 308
Concord, NC 28026-0308

Horace Payne
Dominion North Carolina Power
PO Box 26532
Richmond, VA 23261
horace.p.payne@dom.com

H. Wayne Wilkins
Energy United EMC
PO Box 1831
Statesville, NC 28687-1831
wayne.wilkins@energyunited.com

Shirley Mitchell
Fountain Municipal Electric Department
PO Box 134
Fountain, NC 27829
TOFClerk2001@aol.com

Richard Feathers
Green Co Solutions, Inc.
PO Box 27306
Raleigh, NC 27611-7306
rick.feathers@ncemcs.com

Norman Sloan
Haywood EMC
376 Grinstone Rd
Waynesville, NC 28785-6120
norman.sloan@haywoodemc.com

E. Keen Lassiter
Law Offices of E. Keen Lassiter, P.A.
102-C Regency Blvd
Greenville, NC 28590
ekllawoffice@yahoo.com

Bruce Burcat
Mid-Atlantic Renewable Energy Coalition
PO Box 385
Camden, DE 19934
marec.org@gmail.com

Kurt Olson
NC Sustainable Energy Association
PO Box 6465
Raleigh, NC 27628
kurt@energync.org

NC Warn
2812 Hillsborough Rd
Durham, NC 27705
ncwarn@ncwarn.org

Roy Jones
North Carolina Municipal Power Agency
1427 Meadow Wood Blvd
Raleigh, NC 27626-0513
rjones@electricities.org

Becky Ceartas
Greenpeace
306 Parham St, Suite 200-c
Raleigh, NC 27601
becky.ceartas@greenpeace.org

Charles Guerry
Halifax EMC
PO Box 667
Enfield, NC 27823-0667
cguerry@halifaxemc.com

Robert Kaylor
Law Office of Robert Kaylor
3700 Glenwood Ave, Suite 330
Raleigh, NC 27612
bkaylor@rwkaylorlaw.com

E. Brett Breitschwerdt
McGuire Woods, LLP.
PO Box 27507
Raleigh, NC 27601
bbreitschwerdt@mcguirewoods.com

Richard Feathers
NC Electric Membership Corporation
PO Box 27306
Raleigh, NC 27611-7306
rick.feathers@ncemcs.com

Michael Youth
NC Sustainable Energy Association
PO Box 6465
Raleigh, NC 27628
michael@energync.org

Joseph Eason
Nelson, Mullins, Riley, & Scarborough, LLP
PO Box 30519
Raleigh, NC 27622-0519
joe.eason@nelsonmullins.com

R.G. Brecheisen
Piedmont EMC
PO Drawer 1179
Hillsborough, NC 27278-1179
randy.brecheisen@pemc.org

Steve Blanchard
Public Works Commission Fayetteville
PO Box 1089
Fayetteville, NC 28302-1089
steve.blanchard@faypwc.com

Joseph Joplin
Rutherford EMC
PO Box 1569
Forest City, NC 28043-1569
jjoplin@remc.com

Charlotte Mitchell
Styers, Kemerait & Mitchell
1101 Hayes St, Suite 101
Raleigh, NC 27604
cmitchell@StyersKemerait.com

Nickey Hendricks, Jr.
The City of Kings Mountain
PO Box 429
Kings Mountain, NC 28086
nickh@cityofkm.com

William Whisnant
Town of Winterville
2571 Railroad St
Winterville, NC 28590
terri.parker-eakes@wintervillenc.com

John Runkle
Attorney
2121 Damascus Church Road
Chapel Hill, NC 27516
jrunkle@pricecreek.com

Gudrun Thompson
Southern Environmental Law Center
601 West Rosemary St, Suite 220
Chapel Hill, NC 27516-2356
gthompson@selcnc.org

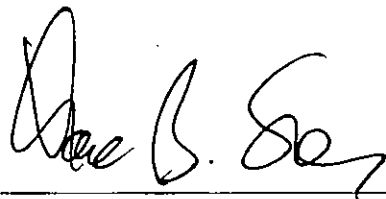
Mark Calvert
Tennessee Valley Authority
400 West Summitt Hill Dr – WT 6A-K
Knoxville, TN 37902-1401
mscalvert@tva.gov

Lynette Romero
Town of Oak City
PO Box 298
Oak City, NC 27857
OAKCITY204@EMBARQMAIL.COM

James West
West Law Offices
434 Fayetteville Street, Suite 2325
Raleigh, NC 27601
jpwest@westlawpc.com

This is the 1st day of July, 2013.

By: _____



Lawrence B. Somers
Deputy General Counsel
Duke Energy Corporation
P.O. Box 1551/PEB 20
Raleigh, North Carolina 27602
Tel: (919) 546-6722
bo.somers@duke-energy.com

FILED

JUL 01 2013

Clerk's Office
N.C. Utilities Commission

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-100, SUB 118

In the Matter of Investigation
of the Integrated Resource Plan
in North Carolina for 2008

) DUKE ENERGY CAROLINAS' REVISED
) 2008 RENEWABLE ENERGY & ENERGY
) EFFICIENCY PORTFOLIO STANDARD
) COMPLIANCE PLAN

**DUKE ENERGY CAROLINAS' REVISED
RENEWABLE ENERGY AND ENERGY EFFICIENCY
PORTFOLIO STANDARD ("REPS")
COMPLIANCE PLAN**

TABLE OF CONTENTS

	PAGE
I. INTRODUCTION.....	3
II. REPS COMPLIANCE PLAN DEVELOPMENT.....	4
A. ENERGY EFFICIENCY.....	4
B. RENEWABLE ENERGY RESOURCES.....	4
C. RENEWABLE ENERGY CERTIFICATES.....	5
III. COMPLIANCE PLAN.....	6
A. ENERGY EFFICIENCY.....	6
B. RENEWABLE ENERGY RESOURCES.....	7
1. Solar Energy Resources.....	7
2. Swine Waste Resources.....	8
3. Poultry Waste Resources.....	10
4. Hydropower.....	11
5. Biomass.....	11
C. RENEWABLE ENERGY CERTIFICATES.....	12
IV. COST IMPLICATION OF REPS COMPLIANCE PLAN.....	13
A. CUSTOMER ACCOUNT DEFINITION.....	13
B. CURRENT AND PROJECTED AVOIDED COST RATES.....	14
C. PROJECTED TOTAL NORTH CAROLINA RETAIL AND WHOLESALE SALES AND YEAR END NUMBER OF CUSTOMER ACCOUNTS BY CLASS.....	15
D. PROJECTED ANNUAL COST CAP COMPARISON OF TOTAL AND INCREMENTAL COSTS, REPS RIDER AND FUEL COST IMPACT	15
V. WHOLESALE CUSTOMER COMPLIANCE.....	16
VI. REQUEST FOR CLARIFICATION.....	16
ATTACHMENT	
A—Summary Table of Renewable Energy Resources.....	19

I. INTRODUCTION

Duke Energy Carolinas, LLC (“Duke Energy Carolinas” or the “Company”) submits its first annual Renewable Energy and Energy Efficiency Portfolio Standard Compliance Plan (“Compliance Plan”) in accordance with N.C. Gen. Stat. § 62-133.8 and Commission Rule R8-67(b). This Compliance Plan provides the required information and outlines the Company’s projected plans for the period 2008-2010.¹ In Section V, the Compliance Plan also describes the wholesale customers for whom the Company will provide renewable energy resources.

The North Carolina General Assembly enacted Session Law 2007-397 (“Senate Bill 3”), which includes the North Carolina Renewable Energy and Energy Efficiency Portfolio Standard (“REPS”), on August 2, 2007, in order to:

- (a) diversify the resources used to reliably meet the energy needs of consumers in the State;
- (b) provide greater energy security through the use of indigenous energy resources available within the State;
- (c) encourage private investment in renewable energy and energy efficiency; and,
- (d) provide improved air quality and other benefits to energy consumers and citizens of the state.

N.C. Gen. Stat. § 62-2(a)(10) (2008). Duke Energy Carolinas seeks to advance these State policies through the activities and efforts set forth in this Compliance Plan as well as the Company’s energy efficiency plan filed in Docket No. E-7, Sub 831, and the Company’s Distributed Generation Solar Photovoltaic “PV” application filed in Docket No. E-7, Sub 856.

In accordance with the numerous provisions of Senate Bill 3, the Commission conducted a rule-making proceeding in order to implement this comprehensive energy legislation. On February 29, 2008, the Commission issued its Order Adopting Final Rules in Docket No. E-100, Sub 113, which addressed over one hundred issues that were raised during the rule-making. However, the Company has identified additional issues regarding the REPS provisions for which it seeks further clarity as it develops its compliance strategy and plans. These issues are set forth in Section VI of this Compliance Plan.

¹ Pursuant to NCUC Rule R8-67(b)(1), this Compliance Plan reflects Duke Energy Carolinas’ present planning efforts to meet the REPS requirements for the current and immediately subsequent two calendar years.

II. DEVELOPMENT OF REPS COMPLIANCE PLAN

In developing Duke Energy Carolinas' REPS Compliance Plan, the Company considered the availability of the following resources: (A) energy efficiency, (B) renewable energy resources including owned renewable energy resources and purchased power agreements, and (C) renewable energy certificates ("RECs").

A. ENERGY EFFICIENCY

Duke Energy Carolinas sees great potential value in maximizing the opportunity to use cost-effective energy efficiency savings as part of its REPS compliance strategy. Assuming timely approval by the Commission of the Company's proposed Energy Efficiency Plan, Duke Energy Carolinas will track the energy savings generated from its energy efficiency programs and use or bank credits associated with the savings to partially achieve the renewable energy requirements of REPS. The Company will seek to achieve 25% (the maximum allowed) of its general REPS requirements through energy savings from the implementation of energy efficiency programs under the save-a-watt model.

B. RENEWABLE ENERGY RESOURCES

Throughout the three-year planning horizon for this Compliance Plan, Duke Energy Carolinas' compliance strategy considers a balanced approach of utilizing: (1) existing or new Duke Energy Carolinas-owned assets, and (2) the purchase of energy from renewable energy resources available in the market to satisfy the requirements of REPS. N.C. Gen. Stat. § 62-133.8(b)(1) and (d). Duke Energy Carolinas believes that the best interests of all stakeholders can be achieved through the combination of owned assets and purchased resources to meet its REPS requirements. The Duke Energy Carolinas' request for proposals ("RFP") process was designed to solicit bids that included both purchased power and numerous options for ownership of renewable energy resources. Initiated in April 2007, the RFP process sought to determine which qualified renewable² resources would provide the greatest value to customers and deliver a mix of renewable energy to Duke Energy Carolinas.

In total, Duke Energy Carolinas received ninety-four different proposal permutations from twenty-six different companies. The Company evaluated the bids based on (1) economic analysis, (2) risk of project

² N.C. Gen. Stat. § 62-133.8(a)(8) defines a renewable energy resource as "solar electric, solar thermal, wind, hydropower, geothermal, or ocean current or wave energy resource; a biomass resource, including industrial waste, animal waste, wood waste, spent pulping liquors, combustible residues, combustible liquids, combustible gases, energy crops, or landfill methane; waste heat derived from a renewable energy resource and used to produce electricity or useful, measurable thermal energy at a retail electric customer's facility; or hydrogen derived from a renewable energy resource. Renewable energy resource does not include peat, a fossil fuel, or nuclear energy source."

execution, and, (3) analysis of other factors. Economic analysis involved a life-cycle benefit-cost approach by which renewable resources were valued on the basis of their cost relative to the combination of their energy value, capacity value, and environmental value arising from avoided emissions. Analysis of project execution risk involved an evaluation of potential risk factors including owner/operator experience, whether the proposed technology was proven and reliable, the status of the project being proposed (permits, site control, financing, etc), access to transmission or distribution, and credit quality. The Company utilized the consultant Black & Veatch to conduct certain aspects of the analysis of project execution. Finally, other factors that were considered included but were not limited to dispatch flexibility, deliverability, the mix of renewable resources, and location of the projects.

As discussed in Section III below, in order to meet the solar energy requirement or carve-out for 2010, the Company plans to develop 10 MW (DC) of distributed solar photovoltaic projects and to purchase all of the electrical output from a 21.5 MW (DC) solar farm. Additionally, Duke Energy Carolinas will seek to utilize its existing generation to the extent possible, including the production of electricity from its hydropower assets and exploring the feasibility of using biomass energy resources as fuel in existing generation facilities to meet its REPS requirements. Duke Energy Carolinas will also continue to pursue opportunities to purchase electric power from renewable energy facilities as well as pursue the potential development of new Duke Energy Carolinas-owned renewable energy generation resources to meet the overall renewable energy goals.

C. RENEWABLE ENERGY CERTIFICATES ("RECs")

Duke Energy Carolinas also will utilize RECs to achieve the REPS renewable energy requirements. The Company is currently developing a REC standard offer targeted primarily toward in-state REC purchases. The Company will update the Commission on the progress of this project in its annual Compliance Report. Additionally, the Company believes that the purchase of low cost out-of-state RECs will be an important component of the Company's plans to meet the REPS requirements. Out-of-state RECs may be less expensive than in-state RECs due to differences in availability of renewable resources across the country, supply and demand characteristics for RECs in various regions, or other factors. Accordingly, Duke Energy Carolinas will seek to achieve up to 25% (the maximum allowed) of its REPS requirements through the purchase of RECs from out-of-state resources provided the Company is indeed able to purchase such RECs at attractive prices.

III. REPS COMPLIANCE PLAN

A. ENERGY EFFICIENCY ("EE")

In Docket No. E-7, Sub 831, Duke Energy Carolinas seeks approval of its proposed Energy Efficiency Plan, including a portfolio of energy efficiency programs and a new regulatory model called "save-a-watt".

The Energy Efficiency Plan is designed to offset energy and capacity loads that would otherwise be served by generating assets in the Company's North Carolina service territory. The Company has developed, and upon approval will market, a portfolio of efficiency programs enabling customers to lower their energy usage through direct customer participation. Duke Energy Carolinas' proposal for energy efficiency will play a significant role in the Company's ability to achieve the REPS requirements. The Commission recently conducted an evidentiary hearing on the Company's Energy Efficiency Plan. The following provides a summary of the Company's energy efficiency programs under save-a-watt set forth in greater detail in Docket No. E-7, Sub 831.

The save-a-watt model provides Duke Energy Carolinas the incentive to pursue all cost-effective energy efficiency initiatives. It is the Company's goal to supplement these programs in future years with new program offerings, expanding the potential cost-effective energy efficiency impacts that can be achieved.

Residential customer programs include: Residential Energy Assessments, Residential Smart Saver® Programs, Low Income Energy Efficiency and Weatherization Assistance Program, Energy Efficiency Education Program for Schools, Power Manager. Non-Residential customer programs include: Non-Residential Energy Assessments, Non-Residential Smart Saver® Program, and PowerShare.® In addition, the Company is developing research pilot programs for customers.

Duke Energy Carolinas will utilize the Measurement and Verification ("M&V") methodologies developed for the Energy Efficiency Plan, as filed in Docket No. E-7, Sub 831. The Company will utilize current state-of-the art evaluation approaches used within the field of energy program evaluation. These approaches are consistent with the methods specified in the California Public Utilities Commission's Program Evaluation Protocols³ (April 2006), the California Evaluation Framework⁴ (June

³ State of California, Public Utilities Commission, California Energy Efficiency Evaluation Protocols: Technical, Methodological and Reporting Requirements for Evaluation Professionals, April 2006.

⁴ TecMarket Works, California Evaluation Framework, A report for the California Public Utilities Commission, June 2004.

2004), USDOE's Impact Evaluation Framework for Technology Deployment Programs⁵ (July 2007), International Performance Measurement and Verification Protocols (IPMVP)⁶ and the National Energy Action Plan's Model Energy Efficiency Program Impact Evaluation Guide⁷ (November 2007). Duke Energy Carolinas intends to use these types of publicly vetted and peer reviewed evaluation approaches that are currently the accepted standards within the energy efficiency evaluation industry for the purposes of measuring the impacts of energy efficiency programs of Save-a-Watt for compliance with REPS.

Pursuant to Rule R8-67(b)(1) and upon approval and implementation of these proposed programs, the Company plans to implement energy efficiency measures under the Energy Efficiency Plan. Pursuant to N.C. Gen. Stat. § 62-133.8(b)(2)f, Duke Energy Carolinas will utilize the banking provision to carry forward any RECs generated on the Carolinas system from a new renewable energy facility or saved due to energy efficiency to meet the requirements for subsequent years. If the Company is able to implement these programs by January 1, 2009, it projects that it will be able to bank the renewable energy credits ("RECs") generated from 234,132 MWh in 2009 and 490,634 MWh of energy efficiency savings toward the compliance obligation in 2012 under N.C. Gen. Stat. § 62-133.8(b)(2)f.

B. RENEWABLE ENERGY RESOURCES

1. Solar Energy Resources

Pursuant to N.C. Gen. Stat. § 62-133.8(d), Duke Energy Carolinas must use solar energy resources that equal a minimum of two hundredths of one percent (0.02%) of the total electric power in kilowatt hours sold to retail customers in North Carolina or an equivalent amount of energy by 2010. The Company plans to achieve these solar requirements by 2010 through the following efforts:

- a. On May 21, 2008, Duke Energy Carolinas entered into a twenty year Purchased Power Agreement ("PPA") with SunEdison for the purchase of all electricity generated from a 21.5 MW (DC)⁸ nameplate solar power farm. The SunEdison solar farm will

⁵ United States Department of Energy, Impact Evaluation Framework for Deployment Programs, Sandia Nation Laboratory, Lawrence Berkeley National Laboratory, Innovologie, July 2007.

⁶ United States Department of Energy, International Performance Measurement and Verification Protocol, March 2002.

⁷ United States Environmental Protection Agency, Model Energy Efficiency Program Impact Evaluation Guide: A Resource of the National Action Plan for Energy Efficiency, November 2007.

⁸ Approximately 80-85% of DC energy is delivered to the grid as useable alternating current (AC). It is also assumed that 50% of this capacity will be coincidental with the system peak.

generate an estimated 27,000 MWh of electricity in the first full year of production. The SunEdison solar farm has a target completion date of December 31, 2010. However, the solar farm will achieve full generation capacity no later than March 31, 2011.

- b. On June 6, 2008, Duke Energy Carolinas filed an application in Docket No. E-7, Sub 856 for a Certificate of Public Convenience and Necessity and Proposed Cost Recovery Approach with the Commission for the investment in a Distributed Generation Solar PV program. The size of the program has recently been revised to an investment of approximately \$50 million to construct 10 MW (DC) nameplate of distributed generation solar technology to be located within the Company's service territory.

The Company estimates that approximately 4 MW (DC) will be placed into service in 2009 and the remaining 6 MW (DC) will be placed in service in 2010.

If the Application is approved and the distributed generation solar projects are installed as projected, Duke Energy Carolinas estimates it will generate approximately 3,000 MWh in 2009 and 10,500 MWh in 2010. In 2011, the Company projects that its distributed generation solar program will reach full capacity and will produce an estimated 15,000 MWh of electricity. Utilizing the banking provision in Section 62-133.8(b)(2)f, the Company will bank 3,000 MWh of solar generation from 2009 to meet the 2010 solar carve-out. Therefore, in 2010, the Company's Distributed Generation Solar PV program will have generated approximately 13,500 MWh of solar electricity to meet the requirement of the solar carve-out of approximately 11,350 MWh in 2010. The timing of regulatory approval of the Company's distributed solar generation technology program impacts the Company's planning to meet the solar energy carve-out for 2010. The Company noted in docket E-7, Sub 856, that time is of the essence in order to meet the 2010 solar obligation.

2. Swine Waste Resources

Pursuant to N.C. Gen. Stat. § 62-133.8(e), electric suppliers must collectively use swine waste resources equal to seven hundredths of one percent (0.07%) of total retail electric power sold in aggregate by utilities in North Carolina for years 2012-2014. This is an aggregate commitment based on the total retail electric power to be sold in the State in 2011 (MWh). Duke Energy Carolinas' obligation as an electric power supplier has not been specified under this requirement.

The Company has not entered into any contracts for the acquisition of swine waste resources at this time.

By creating a statewide obligation rather than utility-specific obligations Senate Bill 3 acknowledges that swine waste resources may be more feasible or economical in one region of the State than others given the disproportionate allocation of swine waste resources in the State. The lack of clarity as to what Duke Energy Carolinas' obligation is with respect to the requirement; however, impacts the Company's evaluation of swine resources relative to other forms of renewable resources at this time. Further, Section 62-133.8 does not specify the priority of the swine waste carve-out over the general REPS requirement or the other carve-out obligations. As such, this lack of clarity may potentially reduce the amount of swine resources the Company considers to be prudent to acquire over time. The Company observes that the majority of the State's swine resources are not located within its service area, and that it may be unfeasible or uneconomic for swine-based electric power to be transmitted into its service area.

In its *Annual Report to the Governor, the Environmental Review Commission, and the Joint Legislative Utility Review Committee regarding Renewable Energy and Energy Efficiency Portfolio Standard in North Carolina* ("2008 Annual REPS Report") dated October 1, 2008, the Commission indicated that it "expects the electric power suppliers to work together to collectively meet the aggregate obligation" for swine and poultry waste resources. 2008 *Annual REPS Report* at 31 (filed in Docket No. E-100, Sub 113). The Company has had concerns regarding potential anti-trust issues that could arise from joint procurement efforts and appreciates this statement. However, Duke Energy Carolinas believes further clarification from the Commission is warranted to ensure that collaborative procurement to meet these aggregate carve-out obligations is a clearly articulated State policy that is actively supervised by the State.

In addition, Duke Energy Carolinas seeks clarification of its carve-out specific obligation and the priority of the various REPS requirements, in order to clarify whether it is prudent to favor other forms of renewable resources over swine resources in its planning and to consider acquisition of swine resources only in cases where it is evident that the Company would not approach the cost caps specified in N.C. Gen. Stat. § 62-133.8(h)(3). In the event that Duke Energy Carolinas approaches the cost cap, the Company will seek relief from further obligation as permitted in Section 62-133.8(h)(3).

3. Poultry Waste Resources

Pursuant to N.C. Gen. Stat. § 62-133.8(f), electric service providers collectively must use poultry waste resources equal to 170,000 MWh by 2012; 700,000 MWh by 2013; and 900,000 MWh by 2014. This is an aggregate commitment, and Duke Energy Carolinas' obligation as an electric power supplier has not been specified under this requirement.

Duke Energy Carolinas requests clarification as to the Company's specific obligation for the poultry waste carve-out requirement. Further, the Company requests further clarification as to the priority of the REPS requirements. Presently, the Company faces the challenge of needing to meet the intent of Senate Bill 3—to diversify its energy resources through indigenous renewable energy—as it also seeks to make the most prudent investment decisions to develop a portfolio of renewable energy resources.

For well over two years, the Company has engaged in negotiations with a potential poultry-waste generator. These negotiations have been on-going since before the passage of Senate Bill 3. The Company has attempted to acquire poultry-waste resources in good faith, but has not entered into any contracts for the acquisition of poultry waste resources at this time.

As with the previous discussion of swine waste resources, the lack of clarity as to Duke Energy Carolinas' obligation to this state-wide carve-out impacts these negotiations. Specifically, the Company has the following concerns with the poultry waste resource options currently available:

- The amount of energy produced and the high cost of energy as compared to other forms of biomass, may cause a potential poultry contract to consume a very large percentage of the cost cap and potentially exceed the cost cap;
- Annual cost escalation and pass through costs provisions proposed for these poultry waste resources are inconsistent with the fixed customer cost caps leading to increasing amounts of poultry waste relative to other carve-out resources; and
- Poultry waste is comprised of poultry litter and other qualifying renewable materials; however, it is unclear if 100% of a poultry waste facility output will count towards the poultry waste carve-out. If 100% of the output of the poultry waste

facility does not count towards the poultry waste carve-out, this situation exacerbates both the cost cap issues and the uncertainty of the plan to meet the carve-out requirements.

Thus, Duke Energy Carolinas asks the Commission for clarification of the Company's specific obligation and the priority of the various REPS requirements, in order to clarify whether it is prudent to favor other forms of renewable resources over poultry resources in its planning and to consider acquisition of poultry resources only in cases where it is evident that the Company would not approach the cost caps specified in N.C. Gen. Stat. § 62-133.8(h)(3). In the event that Duke Energy Carolinas approaches the cost cap, the Company will seek relief from further obligation as permitted in Section 62-133.8(h)(3).

4. Hydropower

Pursuant to N.C. Gen. Stat. 62-133.8(b)(2)b, Duke Energy Carolinas plans to utilize its hydroelectric power generation to meet a portion of its renewable energy requirement. This section states that an electric power supplier may "[u]se a renewable energy resource to generate electric power at a generating facility other than the generation of electric power from waste heat derived from the combustion of fossil fuel." N.C. Gen. Stat. § 62-133.8(b)(2)b. Section 62-133.8(a)(8) defines a renewable resource as including "hydropower." Duke Energy Carolinas' estimated hydropower resources total 2,030,000 MWh annually. This number is an estimate based on the five-year average of historical production; however actual production may vary based on hydrological conditions.

5. Biomass Resources

Duke Energy Carolinas compliance activities include the generation and purchase of biomass to meet its REPS obligations. Pursuant to N.C. Gen. Stat. § 62-133.8(b)(2)b, an electric power supplier may meet its REPS obligation for renewable energy through the generation of electric power from a renewable energy facility. The Company plans to utilize the following renewable energy resources:

a. Landfill Methane

- i) Duke Energy Carolinas signed a twenty-year PPA with Methane Power Durham, LP to purchase the output of electricity generated from a 2.1 MW capacity landfill gas facility at the Durham Landfill. The Company estimates this landfill gas facility will produce an estimated 17,640 MWh annually and is expected to be operational by May 2009.

b. Biomass Initiatives at Fossil Units

- i) Co-Firing and Repowering of Fossil Units

Duke Energy Carolinas continues to explore the feasibility of co-firing biomass at its fossil units or repowering a fossil unit to be a dedicated biomass facility.

- ii) Biodiesel Activities

On October 27, 2008, Duke Energy Carolinas conducted a Biodiesel Pilot Project at Lee Steam Station Unit 1 to determine the feasibility of using bio-diesel in place of diesel #2 for start-up of fossil units. The Biodiesel Pilot Project utilized B-99 biodiesel fuel in lieu of diesel #2 oil after a planned outage to determine the operational impact of using this renewable resource. The Company will better understand the potential cost impact and environmental benefits of utilizing biodiesel in its units after further analysis of this pilot project.

Duke Energy Carolinas estimates that its biomass resources will total 17,640 MWh annually by 2010.

C. RENEWABLE ENERGY CERTIFICATES

Duke Energy Carolinas signed a ten year and six month agreement with Greenville Gas Producers, LLC to purchase the RECs generated from the operation of a 3.2 MW capacity landfill gas facility at the Enoree Landfill. The Company estimates that the facility will produce an estimated 11,278 MWh in 2008 and 27,068 MWh in 2009 and 2010. The facility began operation on July 11, 2008. The Company also signed a PPA to purchase the energy from this facility on the standard SC avoided cost tariff schedule PP-SC on the five-year fixed rate.

Duke Energy Carolinas continues to plan for the acquisition of RECs that will satisfy the REPS requirements for 2012 and beyond. Duke Energy Carolinas has entered into negotiations to purchase low-cost RECs from out-of-state renewable energy facilities for compliance with REPS.

The Company is developing a REC standard offer for customers to sell their RECs to Duke Energy Carolinas at the market rate. The Company shall set the offer prices at prevailing market rates. Consistent with the Commission's determination in Docket No. E-100, Sub 113 that Senate Bill 3 does not require a mandatory REC purchase obligation, the REC standard offer will be discretionary as needed by the Company.

The Company seeks a determination as to whether unbundled RECs may be purchased in order to satisfy the solar, swine waste and poultry waste carve-out requirements for REPS, and if so, whether those unbundled RECs must come from projects within the State or if out-of-state RECs could also be utilized to meet these requirements.

IV. COST IMPLICATION OF REPS COMPLIANCE PLAN

A. CUSTOMER ACCOUNT DEFINITION

Duke Energy Carolinas proposes the following general rule and limited exceptions to determine the year-end number of customer accounts by class under Commission Rule R8-67(a)(4). The Company defines "account" as an "agreement," or "tariff rate," between Duke Energy Carolinas and a customer in order to determine the per account REPS charge. For example, Residential Service (Schedule RS), General Service (Schedule G), Industrial Service (Schedule I) and Industrial Time of Use Optional Power Service (Schedule OPT-I) agreements will be considered separate agreements or accounts for purposes of determining the REPS per account charges. As a general rule, Duke Energy Carolinas believes that this methodology is consistent with N.C. Gen. Stat. § 62-133.8(h).

However, Duke Energy Carolinas recognizes that fairness dictates that there should be certain exceptions to the general rule defining account as an agreement. Pursuant to Rule R8-67(a)(4), the Company requests Commission approval of the following exceptions. The Company proposes that following service schedules not be considered accounts for purposes of the per account charge because of the low energy use associated with such schedules and the near certainty that customers served under these schedules already will pay a per account charge under another residential, general service or industrial service agreement. The following agreements fall within this exception:

- Outdoor Lighting Service (Schedule OL)
- Floodlighting Service (Schedule FL and FL-N)
- Street and Public Lighting Service (Schedule PL)
- Yard Lighting (Schedule YL)
- Street Lighting (Schedule SL)
- Off-Peak Water Heating (Schedule WC is a sub-metered service)

Other agreements also warrant a deviation from Duke Energy Carolinas' general definition of general service accounts for similar reasons. The Company proposes that these agreements be classified under the Residential per account charge because of the low electricity use associated with these agreements and/or because these agreements may be auxiliary services to another schedule (e.g. well pump, a sign, fire pump, etc.):

- Traffic Signal Service (Schedule TS);
- Building Construction Service (Schedule BC);
- Un-metered Signs (Schedule S)
- Non-residential, Non-demand metered agreement (Schedule G and SG customers typically using less than 3000 kWh per month)

Wholesale year-end number of accounts is included in this compliance plan based on the understanding that wholesale accounts will be defined in the manner the information is reported to the Energy Information Administration (EIA) for annual electric sales and revenue reporting.

B. CURRENT & PROJECTED AVOIDED COST RATES

The current avoided cost rates represent the annualized avoided cost rates in Schedule PP-N (NC), Distribution Interconnection, approved in the 2006 avoided cost filing. The projected avoided cost rates represent a forecast of the same annualized avoided cost rates based on information which is reflected in the Company's Revised Initial Statement and Exhibits in Docket No. E-100, Sub 117 filed on December 3, 2008.

ANNUALIZED CAPACITY AND ENERGY RATES (CENTS PER KWH)			
	<u>2008</u> (Current)	<u>2009</u> (Projected)	<u>2010</u> (Projected)
Variable Rate	5.40	7.41	7.41
5 Year	5.46	6.93	6.93
10 Year	5.51	6.68	6.68
15 Year	5.64	6.72	6.72
20 Year (extrapolated)	5.80	7.02	7.02
25 Year (extrapolated)	5.97	7.35	7.35

C. PROJECTED TOTAL NORTH CAROLINA RETAIL AND WHOLESALE SALES AND YEAR-END NUMBER OF CUSTOMER ACCOUNTS BY CLASS:

The tables below reflect the inclusion of the wholesale customers in the Compliance Plan. See Section V for more information regarding wholesale customer compliance.

Projected Retail Sales for Retail and Wholesale Customers

	2008	2009	2010
Retail MWh Sales	56,375,578	56,515,088	56,948,522
Wholesale MWh Sales	2,272,908	2,324,642	2,369,018
Total MWh Sales	58,648,486	58,839,730	59,317,540

Total Retail and Wholesale Projected Year-end Number of Customer Accounts

Account Type	2008	2009	2010
Residential	1,832,153	1,862,796	1,891,670
Commercial	122,831	124,989	127,342
Industrial	5,260	5,248	5,237

D. PROJECTED ANNUAL COST CAP COMPARISON OF TOTAL AND INCREMENTAL COSTS, REPS RIDER AND FUEL COST IMPACT

The table below reflects the inclusion of the wholesale customers in the compliance plan. See Section V for more information regarding wholesale customer compliance. Projected compliance costs for the period 2008 – 2010 are comprised of the following: the cost of solar energy from the Company's proposed Distributed Generation Solar PV Program, the cost of energy purchases from Methane Power Durham, LP and the cost of REC purchases from Greenville Gas Producers, LLP. Cost data in the table are presented by calendar year, whereas REPS rider proposals will capture costs for the billing period for which the rate will be in effect.

Projected Annual Cost Caps, Fuel Related Cost Impact, Annual REPS Rider

	2008	2009	2010
Projected Annual Cost Caps	\$26,766,366	\$27,093,071	\$27,501,401
Total projected compliance costs	\$ 95,872	\$ 2,539,758	\$ 5,212,718
Total incremental costs	\$ 95,872	\$ 1,637,178	\$ 3,417,848
Recovered through the Fuel Rider	\$ -	\$ 682,080	\$ 1,023,120
Recovered through the Fuel Rider ¢/KWh	-	.0008¢	.0012¢
Annual REPS Rider - Residential	\$ 0.04	\$ 0.60	\$ 1.2

Annual REPS Rider - General	\$ 0.18	\$ 2.98	\$ 6.12
Annual REPS Rider - Industrial	\$ 1.77	\$ 29.77	\$ 61.25

V. WHOLESALE CUSTOMER COMPLIANCE

As part of its portfolio of resources, Duke Energy Carolinas plans to provide services including delivery of renewable energy resources to wholesale customers who request the Company's assistance in meeting the REPS requirements. These wholesale customers—including electric membership corporations ("EMCs"), municipalities, and other wholesale customers—may rely on Duke Energy Carolinas to provide this renewable energy delivery service in accordance with N.C. Gen. Stat. § 62-133.8(c)(2)e.

Currently, Duke Energy Carolinas plans to supply all of the renewable energy resources for Rutherford Electric Membership Corporation, City of Dallas, Forest City, City of Concord, Town of Highlands, and City of Kings Mountain. The forecasted North Carolina retail sales, excluding SEPA, for these customers in aggregate for each of the 3 years being reported is approximately 2,300,000 MWhs or 4 % of the Company's total load. The Company will submit the information required by rule R8-67 for these wholesales customers in its compliance plan and report in subsequent years.

In addition, Duke Energy Carolinas will provide a portion or block of the renewable energy resource requirements to Blue Ridge Electric Membership Corporation and Piedmont Electric Membership Corporation. These wholesale customers shall be responsible for submission of their compliance plans and compliance reports, and for managing the customers' changing demands for renewable energy resources. The Company has not included these customers in its compliance plan.

VI. REQUESTS FOR CLARIFICATION

Duke Energy Carolinas requests clarification regarding several issues to assist it in its REPS compliance planning. We also respectfully ask for the Commission's guidance on how to interpret specific provisions of the REPS requirements. These issues are summarized as follows.

1. Whether the carve-out requirements for solar, swine and poultry waste resources should receive priority over the acquisition of other renewable energy resources to achieve the general REPS requirement of 3% in 2012 and beyond?
2. Whether an electric power supplier should give priority to one carve-out requirement over another carve-out requirement (e.g. poultry waste vs. swine waste) in light of the per account cost cap?
3. What is Duke Energy Carolinas' obligation for the aggregate amount of swine waste resources needed to meet the REPS carve-out requirement in order to meet its obligations under the statute?

4. What amount of the aggregate REPS poultry waste carve-out is Duke Energy Carolinas responsible for achieving in order to meet its obligations under the statute?
5. To clarify that joint procurement or other collaborative efforts among electric power suppliers to obtain resources to meet the state-wide poultry waste and swine waste carve-out requirements is clearly articulated and affirmatively expressed as a State policy, and that the Commission believes that its oversight of REPS compliance constitutes active supervision by the State of this policy.
6. Whether an electric power supplier may satisfy the specific carve-out requirements (e.g. solar, swine and poultry) through the purchase of unbundled RECs from either in-state or out-of-state renewable energy facilities? If out-of-state RECs can be used to meet the carve-out requirements, could an electric power supplier meet 100% of these carve-out requirements with out-of-state RECs, provided that doing so would entail utilizing out-of-state RECs for no more than 25% of its overall renewable energy requirement (or, would the 25% out-of-state limit be applied to each individual carve-out requirement)?
7. N.C. Gen. Stat. § 62-133.8(b)(2)d recognizes that purchased power from new renewable energy facilities located outside the geographic boundaries of the State meet the requirements if the power is delivered to an electric power supplier in the State. If one of Duke Energy Carolinas' South Carolina customers offsets its load as a result of the use of a new renewable energy resource, the effect is the same as a sale of such renewable energy to the Company. Therefore, if this South Carolina customer sells the RECs associated with such power to the Company, will these RECs be treated as "in-state" RECs under N.C. Gen. Stat. § 62-133.8(b)(2)e?
8. In the event that Duke Energy Carolinas develops a surplus of RECs, can the Company sell excess RECs to other parties at any point before RECs are retired?
9. If a poultry waste or swine waste generator utilizes some other fuel, other than poultry waste or swine waste, as part of its fuel supply, will 100% of the generator's output qualify towards the respective poultry waste or swine waste carve-out?
10. Whether thermal energy (and the REC equivalent) produced from a renewable energy resource would qualify as an in-state resource even if the renewable resource is located in the South Carolina portion of the Company's service territory?
11. Whether thermal energy (and the REC equivalent) from a renewable resource that is located within the South Carolina portion of another electric power supplier's service territory who is subject to the REPS would qualify as an in-state resource (e.g. a facility within Progress Energy Carolinas' South Carolina service territory)?

Contemporaneously with the filing of this Compliance Plan the Company will file these issues as a motion for clarification in Docket No. E-100, Sub 113.

Respectfully submitted this 3rd day of December, 2008.

Lara Simmons Nichols, Associate General Counsel
Duke Energy Corporation
P. O. Box 1006, EC03T
Charlotte, North Carolina 28201-1006
704.382.9960
lsnichols@dukeenergy.com

Robert W. Kaylor
Law Office of Robert W. Kaylor, P.A.
225 Hillsborough Street, Suite 160
Raleigh, North Carolina 27603
919.828.5250
rwkaylor@dukeenergy.com

ATTORNEYS FOR DUKE ENERGY CAROLINAS, LLC

ATTACHMENT A

SUMMARY TABLE OF DUKE ENERGY CAROLINAS' RENEWABLE ENERGY RESOURCES

<u>Renewable Energy Resource Type</u>	<u>Production (1 MWH = 1 REC)</u>		
	<u>2008</u>	<u>2009</u>	<u>2010</u>
ENERGY EFFICIENCY PLAN ¹	-	234,132	490,634
SOLAR			
SunEdison	-	-	
DEC's Distributed Generation Solar Program ²	-	3,000	10,500
SWINE	-	-	-
POULTRY	-	-	-
HYDROPOWER	2,030,000	2,030,000	2,030,000
BIOMASS			
Methane Power Durham, LP	-	17,640	17,640
Co-Firing	TBD	TBD	TBD
Bio-diesel	TBD	TBD	TBD
REC Purchases			
Greenville Gas Producers, LLC	11,278	27,068	27,068

¹ Duke Energy Carolinas' Energy Efficiency Plan, Docket E-7, Sub 831, is currently under review by the NC Utilities Commission.

² Duke Energy Carolinas' Distributed Generation Solar Photovoltaic Program, Docket E-7, Sub 856, is currently under review by the NC Utilities Commission.

Progress Energy Carolinas

Integrated Resource Plan

Appendix D
Alternative Supply Resources
NC REPS Compliance Plan

September 2012

(Revised July 2013)

**PROGRESS ENERGY CAROLINAS, INC.'S
2012 REPS COMPLIANCE PLAN**

TABLE OF CONTENTS

I. INTRODUCTION.....	2
II. G.S. § 62-133.8(b): MEETING THE RENEWABLE ENERGY AND ENERGY EFFICIENCY PORTFOLIO STANDARDS FOR ELECTRIC PUBLIC UTILITIES	2
III. G.S. § 62-133.8(c): RENEWABLE ENERGY AND ENERGY EFFICIENCY STANDARDS FOR ELECTRIC MEMBERSHIP CORPORATIONS AND MUNICIPALITIES	4
IV. G.S. § 62-133.8(d): COMPLIANCE WITH REPS REQUIREMENT THROUGH USE OF SOLAR ENERGY RESOURCES.....	5
V. G.S. § 62-133.8(e): COMPLIANCE WITH REPS REQUIREMENT THROUGH USE OF SWINE RESOURCES.....	5
VI. G.S. § 62-133.8(f): COMPLIANCE WITH REPS REQUIREMENT THROUGH USE OF POULTRY WASTE RESOURCES.....	6
VII. CURRENT AND PROJECTED AVOIDED COST RATES.....	7
VIII. PROJECTED TOTAL NORTH CAROLINA RETAIL AND WHOLESALE SALES AND YEAR- END NUMBER OF CUSTOMER ACCOUNTS BY CLASS.....	7
IX. PROJECTED ANNUAL COST CAP COMPARISON OF TOTAL AND INCREMENTAL COSTS, REPS RIDER, AND FUEL COST IMPACT.....	7

I. INTRODUCTION

Progress Energy Carolinas, Inc. (“Progress Energy Carolinas” or the “Company” or “PEC”) submits its annual Renewable Energy and Energy Efficiency Portfolio Standard (“NC REPS” or “REPS”) Compliance Plan (“Compliance Plan”) in accordance with N.C. Gen. Stat. § 62-133.8 and North Carolina Utilities Commission (the “Commission”) Rule R8-67(b). This Compliance Plan, set forth in detail in Section II through Section IX, provides the required information and outlines the Company’s projected plans to comply with NC REPS for the period 2012 to 2014 (“the Planning Period”).

II. G.S. § 62-133.8(b): MEETING THE RENEWABLE ENERGY AND ENERGY EFFICIENCY PORTFOLIO STANDARDS FOR ELECTRIC PUBLIC UTILITIES

Progress Energy Carolinas calculates its NC REPS Compliance Obligations for the Planning Period based on its actual and forecasted retail sales, as well as the actual and forecasted retail sales of those wholesale customers for whom the Company is supplying REPS compliance. The Company’s wholesale customers for which it supplies REPS compliance services are the City of Waynesville, the Town of Sharpsburg, the Town of Stantonsburg, the Town of Black Creek, and the Town of Lucama (collectively referred to as “Wholesale” or “Wholesale Customers”). Table 1 below shows the Company’s retail and Wholesale customers’ REPS Compliance Obligation.

Table 1: Progress Energy Carolinas’ NC REPS Compliance Obligation

Compliance Year	Previous Year PEC Retail Sales	Previous Year Wholesale Customers’ Retail Sales	Total Retail Sales for REPS Compliance	Solar Set-Aside (RECs)	Swine Set-Aside (RECs)	Poultry Set-Aside (RECs)	REPS Requirement (%)	REPS Compliance Obligation (RECs)
2012	37,353,311	155,584	37,508,895	26,256	26,256	49,354	3%	1,125,267
2013	36,868,966	155,568	37,024,535	25,917	25,917	203,224	3%	1,110,736
2014	37,255,920	155,982	37,411,902	26,188	26,188	261,288	3%	1,122,357

Note: Annual compliance REC requirements are determined based on prior-year MWh sales. MWh sales presented above are for compliance years 2012 – 2014 and represent actual MWh sales for 2011, and projected MWh sales for 2012 and 2013, respectively.

PEC is constantly evaluating options to meet its overall requirements. Under G.S. § 62-133.8 (b), opportunities to meet the REPS requirements can be categorized as follows: PEC ownership of or purchases from new renewable energy generation; the use of renewable energy resources at generating facilities; purchases of renewable energy certificates (RECs); and implementation of energy efficiency measures.

With regard to utility ownership of new renewable energy facilities, PEC does not own or operate new renewable generating facilities, however, PEC does evaluate the ownership of new

¹ Pursuant to Commission Rule R8-67(b)(1), this Compliance Plan reflects Progress Energy Carolinas’ present planning efforts to meet the REPS requirements for the current year and immediately subsequent two calendar years.

renewable energy facilities as described in the Screening of Generation Alternatives portion of this IRP. As with ownership of any new generation, future direct or partial ownership of new renewable energy generating facilities is dependent upon cost-effectiveness and portfolio requirements.

PEC engages in ongoing research regarding the use of alternative fuels meeting the definition of renewable energy resources at its existing generation facilities. Introducing alternative fuels in traditional power plants must prove to be technically feasible, reliable, and cost effective prior to implementation. To the extent PEC determines the use of alternative fuels is appropriate and fits within the framework of Senate Bill 3, these measures would be included in future compliance plan filings.

Regarding the purchase of energy or RECs from new renewable energy facilities, PEC has adopted a competitive bidding and evaluation process whereby market participants have an opportunity to propose projects on a continuous basis. PEC maintains an open RFP for non-solar projects less than 10 MWs in size. In addition, PEC from time-to-time issues resource specific RFPs, as needed to meet Senate Bill 3 obligations. Through the renewable RFP process, since November 2007, PEC has executed a significant number of contracts for solar, hydro, biomass, landfill gas and out of state wind RECs, as shown on Exhibit A.

PEC has purchased out-of-state wind and solar RECs as allowed by Senate Bill 3. These RECs are some of the most cost effective options available, and they will allow PEC to balance its compliance each year while also helping to mitigate vendor performance risk.

PEC is using energy efficiency (EE) measures and programs to comply with a portion of the Senate Bill 3 requirements. A discussion of existing and proposed programs is included in the demand-side management (DSM) and EE section in Appendix E of the IRP. Table 2 below shows the projected MWhs reduced by the incremental EE programs. The EE MWhs are limited to 25% for the Planning Period, and any EE MWhs that exceed the specified cap in any given year will be banked and used in future compliance years.

Table 2: Progress Energy Carolina's Energy Efficiency Forecast

Compliance Year	Energy Efficiency Forecast	Allowed Energy Efficiency for REPS Compliance (%)	PEC REPS Requirement (RECs)	Allowed Energy Efficiency for REPS Compliance (REC Equivalent)	Energy Efficiency Banked for Future Compliance (REC Equivalent)
2012	505,081	25%	1,120,599	280,150	224,931
2013	678,740	25%	1,106,069	276,517	402,222
2014	848,132	25%	1,117,678	279,419	568,712

Progress Energy Carolinas is well positioned to meet the general REPS compliance obligation. The Company has executed numerous contracts; continues to solicit additional proposals for renewable projects; has purchased RECs from numerous projects, some of which began producing RECs in 2008; has implemented energy efficiency programs, which began producing RECs in 2008; and has executed agreements with several projects for out-of-state wind and solar

CONFIDENTIAL

RECs. Table 3 below displays Progress Energy Carolinas' projected compliance with the general REPS requirement. The Contracted Purchases represent expected deliveries from projects under contract. The Undesignated Resources shows the estimated number of additional RECs that PEC needs to secure to be compliant with its pro-rata share of the swine and poultry requirements, as described below.

Table 3: PEC Compliance with the Total REPS Compliance Obligation

Compliance Year	2012	2013	2014
Contracted Purchases			
Undesignated Resources			
Energy Efficiency	280,150	276,517	279,419
Total Supply Resources and EE (RECs)			
REPS Requirement (RECs)	1,125,267	1,110,736	1,122,357
Over or (Under) Supply of Resources Relative to Requirement (RECs)			
Beginning REC Balance (Dec 31, 2011)			
RECs Added (Removed)			
Ending REC Balance			

III. G.S. § 62-133.8(c): RENEWABLE ENERGY AND ENERGY EFFICIENCY STANDARDS FOR ELECTRIC MEMBERSHIP CORPORATIONS AND MUNICIPALITIES

While this requirement does not apply specifically to PEC, a number of wholesale customers, as described above, have agreements with PEC whereby PEC will obtain the RECs necessary for the wholesale customer's compliance. Table 1 shows the load and associated REPS requirement for these wholesale customers. In addition, Table 10 includes the anticipated premium cap for these wholesale customers.

PEC continues to refine development of the overall process to comply on behalf of these wholesale customers. The costs associated with renewable resources procured to comply with the combined retail loads of PEC and the wholesale customers are included in PEC's compliance plan and will be allocated across the total RECs and recovered appropriately. The details of all purchases and the cost allocation to each party will be included in PEC's annual compliance report filing.

CONFIDENTIAL

IV. G.S. § 62-133.8(d): COMPLIANCE WITH REPS REQUIREMENT THROUGH USE OF SOLAR ENERGY RESOURCES

In order to achieve compliance with the initial solar set-aside requirements, PEC has executed a number of solar contracts, as listed on Exhibit A. In addition to these contracts, PEC has maintained a commercial PV program since July 2009 that has a target of adding five (5) MWs of grid-tied solar PV per year. PEC also implemented a residential PV program on January 1, 2011 with a target of adding one (1) MW per year of distributed solar generation. PEC issued a solar RFP in June 2011 for grid-connected projects ranging in size from one (1) to three (3) MW. This RFP resulted in [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL]. Table 4 shows the solar set-aside requirement. The Contracted Solar column shows the anticipated production from both contracted PV and solar thermal projects that vary in technology, size, and geographic location.

Table 4: Compliance with the Solar Set-Aside

Compliance Year	Solar Set-Aside Requirement (RECs)	Contracted Solar (RECs)	Delta with Requirement (RECs)	Beginning Solar REC Position (RECs)	Ending Solar REC Position (RECs)
2012	26,256	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
2013	25,917	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
2014	26,188	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

V. G.S. § 62-133.8(e): COMPLIANCE WITH REPS REQUIREMENT THROUGH USE OF SWINE RESOURCES

On February 12, 2010, in Docket E-100, Sub 113, the Commission issued an Order approving the issuance of a joint RFP as a means for the state's electric power suppliers to work together to collectively meet the swine waste resource set-aside. The state's electric power suppliers ("Swine REC Buyers Group") issued a joint RFP for swine waste generation on February 15, 2010. Through this RFP, PEC executed [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] contracts. Project developers estimated that they would collectively build as many as [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] swine waste-to-energy facilities throughout North Carolina and that total REC production would exceed the statewide aggregate Swine Set-Aside requirement for 2012 and 2013. In the spring of 2012, the Swine REC Buyers Group terminated [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] contracts for reasons including consistent failure to develop the project, inability to assign the contract to another developer, and consistent failure to demonstrate progress toward commercial operation. After terminating these contracts, PEC has [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL], as shown on Exhibit A. As described in the Amended Joint Motion in Docket No. E-100, Sub 113 filed July 17th, 2012, PEC and other electric power suppliers are seeking to delay the swine and poultry waste set-aside requirement of N.C. Gen. Stat. §§ 62-133.8 (e) and (f), respectively, by two years to

CONFIDENTIAL

allow additional time to meet compliance with these requirements ("Amended Joint Motion"). Table 5 below shows the swine set-aside requirement. The Contracted Swine column shows the number of swine RECs PEC has under contract and expects to receive by year. The Undesignated Swine column shows the estimated number of additional RECs that PEC needs to secure to be compliant with the 2014 swine requirement.

Table 5: Compliance with the Swine Set-Aside

Compliance Year	Swine Set-Aside Requirement (RECs)	Contracted Swine (RECs)	Undesignated Swine (RECs)	Total Swine Resources (RECs)
2012	26,256	-	-	-
2013	25,917			
2014	26,188			

VI. G.S. § 62-133.8(f): COMPLIANCE WITH REPS REQUIREMENT THROUGH USE OF POULTRY WASTE RESOURCES

As described in the Amended Joint Motion in Docket No. E-100, Sub 113 filed July 17th, 2012, PEC and other electric power suppliers are seeking to delay the swine and poultry waste set-aside requirement of N.C. Gen. Stat. §§ 62-133.8 (e) and (f), respectively, by two years to allow additional time to meet compliance with these requirements ("Amended Joint Motion"). The statewide requirement for poultry waste is 170,000 RECs in 2012, 700,000 RECs in 2013, and 900,000 RECs in 2014. PEC projects its pro-rata requirement for 2012 is 49,354 RECs, PEC's requirement in 2015 is approximately 203,000 RECs, and PEC's requirement in 2016 is approximately 261,000 RECs. In July 2010 PEC joined with other electric suppliers and issued a Joint Poultry RFP, resulting in [BEGIN CONFIDENTIAL]

[END CONFIDENTIAL]. Table 6 below shows the poultry set-aside requirement. The Contracted Poultry column shows the projection of the RECs PEC will receive under these contracts. The Undesignated Poultry column shows the estimated number of additional RECs that PEC needs to secure to be compliant with its pro-rata share of the 170,000 statewide requirement by 2014.

Table 6: Compliance with the Poultry Set-Aside

Compliance Year	Poultry Set-Aside Requirement (RECs)	Contracted Poultry (RECs)	Undesignated Poultry (RECs)	Total Poultry Resources (RECs)
2012	49,354	-	-	-
2013	203,224	-	-	-
2014	261,288			

VII. CURRENT AND PROJECTED AVOIDED COST RATES

The current and projected avoided cost rates represent the annualized avoided cost rates for Cogeneration and Small Power Producer (CSP) Schedule CSP-27, approved in the Commission Order issued in Docket No. E-100, Sub 127 in August 2011.

Table 7: Annualized Capacity and Energy Rates (cents per KWh)

	2012 (Current)	2013 (Projected)	2014 (Projected)
Variable Rate	5.786¢	5.786¢	5.786¢
5 Year	6.184¢	6.184¢	6.184¢
10 Year	6.816¢	6.816¢	6.816¢
15 Year	7.286¢	7.286¢	7.286¢

VIII. PROJECTED TOTAL NORTH CAROLINA RETAIL AND WHOLESALE SALES AND YEAR-END NUMBER OF CUSTOMER ACCOUNTS BY CLASS

The tables below show the actual and projected retail sales for PEC and the Wholesale Customers.

Table 8: Retail Sales for Retail and Wholesale Customers

year	2011 Actual	2012 Forecast	2013 Forecast	2014 Forecast
Retail MWh Sales	37,353,311	36,868,966	37,255,920	37,708,885
Wholesale MWh Sales	155,584	155,568	155,982	156,398
Total MWh Sales	37,508,895	37,024,535	37,411,902	37,865,283

Table 9: Retail and Wholesale Year-end Number of Customer Accounts

year	2011 Actual	2012 Forecast	2013 Forecast	2014 Forecast
Residential Accts	1,115,346	1,126,564	1,137,912	1,151,075
General Accts	181,666	185,011	188,420	192,762
Industrial Accts	2,069	2,090	2,110	2,131

IX. PROJECTED ANNUAL COST CAP COMPARISON OF TOTAL AND INCREMENTAL COSTS, REPS RIDER, AND FUEL COST IMPACT

Table 10 shows the projected compliance costs for contracted resources by calendar year. The cost cap data is based on the number of accounts as reported above.

Table 10: Projected Annual Cost Caps, Fuel Related Cost Impact, Annual REPS Rider

year	2012	2013	2014
Total projected REPS compliance costs	\$126,663,218	\$131,011,101	\$134,861,111
Recovered through the Fuel Rider	\$106,186,016	\$110,855,709	\$112,221,355
Total Incremental costs (REPS Rider)	\$20,477,202	\$20,155,392	\$22,639,757
Total Including GRT and Regulatory Fee	\$21,184,773	\$20,851,843	\$23,422,053
Projected Annual Cost Caps (REPS Rider)	\$42,703,052	\$43,360,012	\$44,028,334
Unused Available Premium	\$21,518,279	\$22,508,168	\$20,606,281

[BEGIN CONFIDENTIAL]

[illegible]

[illegible]

[illegible]

████████████████████	██████	████	████	████	████	████	████
██████████	██████	████	████	████	████	████	████
██████████	██████	████	████	████	████	████	████
██████████	██████		████	████		████	████
██████████	6 years *	████	████	████	████	████	████
██████████ (Thermal RECs)	6 years	-	-	-	████	████	████
██████████	██████	████	████	████	████	████	████
██████████	██████		████	████		████	████
██████████	██████	████	████	████	████	████	████

CONVENTIONAL		1980	1981	1982	1983	1984	1985	1986
COAL								
Oil								
Gas								
Geothermal								
Hydro Electric								
Other								
TOTAL 3RD PARTY RESOURCES		1,491,380	1,563,549	1,581,127	1,021,288	1,098,783	1,123,783	

TOTAL 3RD PARTY RESOURCES	1,491,380	1,563,549	1,581,127	1,021,288	1,098,783	1,123,783
----------------------------------	-----------	-----------	-----------	-----------	-----------	-----------