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Clerk's Office
N.C. Utilities Commission

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' 2009 Revised REPS Compliance Plan and
Duke Energy Progress' 2009 Revised REPS Compliance Plan
Docket No. E-100, Sub 124**

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 for filing an original and thirty-one (31) copies of Duke Energy Carolinas, LLC's ("DEC") Revised 2009 Renewable Energy and Energy Efficiency Portfolio Standard ("REPS") Compliance Plan and Duke Energy Progress, Inc.'s ("DEP") Revised Exhibit 1 of its 2009 REPS Compliance Plan, in connection with the referenced matter.

The June 3, 2013 Order required DEC and DEP to annually review their REPS compliance plans from four years earlier and disclose any redacted information that is no longer considered a trade secret. DEC has reviewed its 2009 REPS Compliance Plan and determined that all of the information originally filed under seal, located at pages 5, 6 and 16, no longer qualifies as a trade secret.

DEP has reviewed its 2009 REPS Compliance Plan and determined that certain following information contained in Exhibit 1 on page D-7 no longer qualifies as a trade secret: contract duration, capacity MW, Energy MWh and Expected Annual RECs. However, certain information on page D-7 is still a trade secret and commercially sensitive information, 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 counterparties with whom DEP has contracted for Renewable Energy

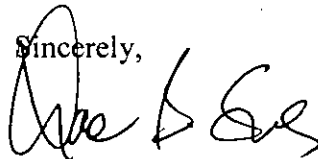
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Certificates. Public disclosure of this information would harm DEP's ability to negotiate and procure cost-effective purchases and discourage potential bidders from participating in requests for proposals.

For filing purposes, I also enclose one original and one copy with the confidential information on Revised Exhibit 1 of DEP's 2009 REPS Compliance Plan redacted. Parties to the docket may contact DEP to obtain copies pursuant to an appropriate confidentiality agreement.

Thank you for your attention to this matter. If you have any questions, please let me know.

Sincerely,

A handwritten signature in black ink, appearing to read "Lawrence B. Somers", written over the word "Sincerely,".

Lawrence B. Somers

Enclosures
STAREG3970

CERTIFICATE OF SERVICE

I, Lawrence B. Somers, certify that a copy of Duke Energy Carolinas, LLC's Revised 2009 REPS Compliance Plan and Duke Energy Progress, Inc.'s Revised Exhibit 1 of its 2009 REPS Compliance Plan in Docket No. E-100, Sub 124, 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:

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AUG 30 2013Clerk's Office
N.C. Utilities Commission**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION****DOCKET NO. E-100, SUB 124**

In the Matter of

Investigation of the Integrated Resource

Plan in North Carolina for 2009

)

) DUKE ENERGY CAROLINAS, LLC'S 2009

) RENEWABLE ENERGY & ENERGY

) EFFICIENCY PORTFOLIO STANDARD

) COMPLIANCE PLAN

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

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I. INTRODUCTION

Duke Energy Carolinas, LLC (“Duke Energy Carolinas” or the “Company”) submits its 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, set forth in detail in Section II, provides the required information and outlines the Company’s projected plans for the period 2009-2011.¹ In Section III, the cost implications of the Company’s REPS compliance plan is discussed. In Section IV, the Compliance Plan also describes the Company’s efforts to supply renewable energy resources to its wholesale customers.

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 continued pursuit of its renewable energy strategy, which can be characterized as a strategy of diversification. Specifically, Duke Energy Carolinas seeks to build its portfolio of renewable energy resources through a combination of the following: (1) development of renewable energy resources owned and/or operated by Duke Energy Carolinas; (2) power purchase agreements (“PPA” or “PPAs”) from renewable power generation facilities; and (3) purchases of unbundled renewable energy certificates (“REC” or “RECs”). Additionally, the Company seeks to complement its renewable energy initiatives with the utilization of cost-effective energy efficiency (“EE”) as a key component in its Compliance Plan.

In seeking to build a diversified portfolio of renewable and energy efficiency resources, the Company has undertaken several key efforts, including (1) seeking proposals from various potential renewable suppliers for either PPAs or REC purchase agreements, (2) evaluating opportunities to make direct investments in the ownership and/or operation of renewables, (3) developing programs such as a Standard Offer for RECs to facilitate procurement of RECs from smaller producers, and (4) making regulatory applications to pursue specific initiatives such as the Company’s Distributed Generation Solar Photovoltaic “PV” program, approved in Docket

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.

No. E-7, Sub 856² or the Company's energy efficiency program, filed in Docket No. E-7, Sub 831. The Company believes these actions collectively constitute a thorough and prudent plan for compliance with the REPS law and demonstrate the Company's commitment to pursue its renewable energy and energy efficiency strategies.

II. REPS COMPLIANCE PLAN

A. ENERGY EFFICIENCY

Duke Energy Carolinas received an Order from the Commission resolving certain issues with its proposed Energy Efficiency Plan³, including approval of its portfolio of energy efficiency programs, on February 26, 2009. Duke Energy Carolinas projects that it will achieve more energy efficiency ("EE") than what can be utilized under the REPS law for the foreseeable future, and thus plans to utilize energy efficiency to the fullest extent possible (accounting for 25% of the requirement beginning in 2012)⁴. The Company has already begun rolling out its energy efficiency programs and will bank energy efficiency impacts that are achieved in the 2008-2011 period. Duke Energy currently plans to begin utilizing these banked EE credits in 2012 and thereafter. The Company's Energy Efficiency Programs include: Residential Energy Star® Rates, Residential Energy Assessments, Smart Saver® for Residential Customers, Low Income Services, Energy Efficiency Education Programs for Schools; Non-Residential Energy Assessments, Smart Saver® for Non-Residential Customers, as well as additional programs that are under development.

B. RENEWABLE ENERGY RESOURCES

1. Solar Energy Resources

Pursuant to N.C. Gen. Stat. § 62-133.8(d), the Company must use solar energy resources equal to 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. Based on the current retail sales projection, Duke Energy Carolinas' total retail and wholesale REPS solar energy requirement is estimated to be 11,142 MWh in 2010 and 11,246 MWh in 2011. Duke Energy Carolinas has adhered to the previously described renewable energy strategy in planning to meet the solar set-aside requirements for 2010 and beyond. Specifically, the Company has elected to pursue the following courses of action to acquire solar resources for compliance: (1) construction of solar projects owned and operated by Duke Energy Carolinas, (2) solar PPAs, and (3) solar REC purchase agreements. The following actions have been taken:

² See *Order Granting Certificate of Public Convenience and Necessity Subject to Conditions*, Docket No. E-7, Sub 856 (December 28, 2008).

³ See *Order Resolving Certain Issues, Requesting Additional Information on Unsettled Matters, and Allowing Proposed Rider to Become Effective Subject to Refund*, Docket No. E-7, Sub 831 (February 26, 2009).

⁴ See N.C. Gen. Stat. § 62-133.8(b)(2)c.

- a. In 2008, Duke Energy Carolinas signed a twenty year PPA with SunEdison for the purchase of all electricity generated from a proposed 21.5 MW (DC) nameplate solar farm in Davidson County, NC.
- b. Duke Energy Carolinas' Distributed Generation Solar PV Program.⁵ Duke Energy received Commission approval in 2009 for its Distributed Generation Solar PV program to build, own, and operate a total of 10MW (DC) of solar PV projects on customer sites and/or Duke Energy owned property. Construction of an initial phase of projects is targeted to begin prior to year-end 2009, with the goal of fully implementing the program by the end of 2010.
- c. Purchase of Solar RECs. The Company has entered into long term purchase agreements for solar RECs with two solar development firms: FLS Energy and Vanir Energy. These companies utilize solar thermal technologies including solar water heating to produce solar RECs for compliance with REPS. Contracts with these companies were negotiated through Duke Energy Carolinas' unsolicited bid process.

At this time the Company is confident that it will meet the 2010 and 2011 solar set-aside requirements. However, compliance with these requirements is not without some level of risk. The key factors that introduce risk to meeting these requirements are the following:

- a. SunEdison has experienced challenges in securing the necessary financing commitments for the project as a result of current capital market conditions. Due to the scarcity of financing partners that are participating in this particular market space today, SunEdison has pursued a strategy of attempting to secure financing for the project in tranches, rather than all at once. It is possible that an initial tranche of the project could come online well in advance of what had been expected under the original agreement. However, it is also possible that challenges in securing financing commitments could delay the project or result in a project of a different size. Both Duke Energy Carolinas and SunEdison remain fully committed to the project and are working closely together to address the challenging conditions that the capital markets have presented. Promisingly, SunEdison recently closed on the purchase of the 357 acre site in Davidson County where the project will be located and they have also initiated site preparation work. Duke Energy Carolinas views this as a sign of SunEdison's confidence that they will ultimately be successful in obtaining the necessary financing commitments to complete the project.
- b. Duke Energy Carolinas planned to begin implementation of its Distributed Generation PV program in the first quarter of 2009,

⁵ See NCUC Docket E-7, Sub 856.

pending Commission authorization of its program. As a result of receiving final approval in mid-2009, the Company has experienced a delay of approximately 6 months in the development of these solar energy resources.

- c. Duke Energy Carolinas has entered into multi-year contracts with two solar development companies: FLS Energy and Vanir Energy. The Company executed these contracts in order to meet its projected final portion of the solar set-aside requirement in 2010 and 2011. Because these contracts were recently executed, at this time there is no track record between Duke Energy Carolinas and these parties regarding their ability to deliver RECs in line with the expected quantities. The contracts with these parties provide protections to the Company if these targets are not met. However, the Company merely points out that its ability to comply with the solar set-aside in 2010 and 2011 depends in part on the performance of these parties.

Duke Energy Carolinas will continue to monitor the development and progress of all of these solar initiatives and take appropriate actions as necessary.

The Company continues to seek out and explore additional solar resources that will be needed in order to meet the increased level of the solar requirement that begins in 2012.

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 aggregate commitment shall be based on the total retail electric power sold in the State in 2011. On May 7 2009, in Docket No. E-100, Sub 113, the Commission issued its *Order on Duke Energy Carolinas, LLC, Motion for Clarification* that stated, in relevant part, that the state-wide requirement for swine and poultry waste resources does not impose individual requirements on electric power suppliers, but rather imposes an aggregate requirement on the suppliers to be met collectively. The Commission also ordered that the REPS statute and interpretive Commission rules collectively constitute a clearly articulated State policy and that the Commission's active supervision over REPS compliance removes potential anti-trust implications relating to the required cooperation and joint procurement efforts between the electric power suppliers to meet the swine and poultry waste collective set-aside requirements. As such, in August of this year, Duke Energy Carolinas, Progress Energy Carolinas, Inc., and North Carolina Electric Membership Corporation collectively proposed a pro-rata method for satisfying the requirements of the swine and poultry waste requirements.

Duke Energy Carolinas has pursued a number of pathways to identify swine waste resources to meet its REPS set-aside requirement. However, the Company notes several fundamental challenges that still remain with generating electricity from swine waste. First, the swine waste-

to-electricity industry is in its infancy in North Carolina and proven operators of swine waste-to-electricity projects are scarce. Further, individual project opportunities tend to be quite small in scale relative to the REPS swine requirements, and the Company has not received proposals that are of sufficient scale to meet our expected obligations. Additionally, Duke Energy Carolinas faces the additional constraint of lacking swine waste resources in its service territory. This limitation suggests that Duke Energy Carolinas would incur costs to wheel the energy from other areas, adding to the cost, or, alternatively, other electric power suppliers would need to be the off-taker of energy and allow Duke Energy Carolinas to purchase RECs from those projects. Despite these challenges, Duke Energy Carolinas continues to pursue possible pathways forward to meet the aggregate swine waste set-aside.

The Company has joined Progress Energy Carolinas, Inc., Dominion North Carolina Power, North Carolina Electric Membership Corporation, North Carolina Eastern Municipal Power Agency and North Carolina Municipal Power Agency Number 1 (collectively “the Electric Power Suppliers”) to request that the Commission delay the swine waste set-aside requirement because the Electric Power Suppliers have no indication of a timely source of swine waste generation to meet the time frame and quantities necessary for compliance with the swine waste set-aside.⁶ Duke Energy Carolinas has made reasonable efforts to meet the requirements of the swine waste resources, including but not limited to meeting with potential suppliers, evaluating bids received, and finding and engaging swine waste generators.

Duke Energy Carolinas remains in active discussions with the Electric Power Suppliers in an effort to jointly procure swine waste resources. As required by the Commission’s May 7, 2009 *Order on Duke Energy Carolinas, LLC, Motion for Clarification*, any such joint business arrangement will require prior approval from the Commission. Although the Company appreciates that this requirement is intended to serve the purpose of assuring anti-trust violations are not committed, it nonetheless recognizes that this requirement may impact the speed with which the Company can procure swine waste resources.

3. Poultry Waste Resources

Pursuant to N.C. Gen. Stat. § 62-133.8(f), electric suppliers must collectively use poultry waste resources equal to 170,000 MWh by 2012; 700,000 MWh by 2013; and 900,000 MWh by 2014. As with the swine waste set-aside, this aggregate commitment is to be met collectively by the electric power suppliers of North Carolina. In its 2008 Compliance Plan, Duke Energy Carolinas raised numerous concerns about the procurement of poultry waste resources, including (1) the amount of poultry waste resources required, (2) annual cost escalation and uncertain pass through costs that are incompatible with the nature of the Company’s fixed cost caps; and (3) the question of what percentage of the electricity from a poultry waste facility would qualify for the requirement if other forms of fuel were utilized in addition to poultry waste. Additionally, there continues to be only one potential supplier, Fibrowatt, of electricity derived from poultry waste, with the exception of some early stage concepts that are most appropriate to be considered as research and development opportunities at this time. Although the Commission has responded to the question of what share of the output from a poultry waste facility would count towards the

⁶ See Joint Electric Power Suppliers Motion, Docket E-100, Sub 113 (Aug. 14, 2009) (“the Joint Motion”).

poultry waste requirement (only the portion associated with poultry waste fuel⁷), the Company has been unable to reach an agreement with Fibrowatt because of fundamental problems with the proposed commercial terms. Duke Energy Carolinas continues to negotiate in good faith with Fibrowatt as well as other potential suppliers.

Despite these continued negotiations, the Company has been unable to reach an agreement for poultry waste resources. The Company detailed its concerns along with the other Electric Power Suppliers in the Joint Motion to delay and modify the poultry waste requirements. The key issues that were outlined in the Joint Motion include (1) the lack of poultry waste resource suppliers; (2) that Fibrowatt has focused solely on the two largest utilities in its negotiations; (3) that the prices proposed by Fibrowatt will consume a significant portion of the REPS compliance costs Progress Energy Carolinas, Inc. and Duke Energy Carolinas may recover under N.C. Gen. Stat. § 62-133.8(h); and (4) that the contractual terms proposed by Fibrowatt require a long term commitment of 25 years with pricing containing numerous pass-through provisions with no opportunities for the Electric Power Suppliers to mitigate the risk of price escalation and no assurance of cost recovery should the uncertain cost escalation result in expenditures which exceed the fixed cost caps contained in N.C. Gen. Stat. § 62-133.8(h).

As indicated in the Joint Motion, Duke Energy Carolinas believes that the state-wide poultry waste set-aside requirement is too aggressive. The Company believes that it would not be in the public interest to allocate such a large portion of the State's investments in renewable energy into poultry waste resources where there is no competition among suppliers, no regulation with regards to power pricing, no certainty with regards to the escalation over time of the rates charged; and where it is uncertain what portion of the output of the poultry waste facility would count towards the poultry waste set-aside requirement. It is for these reasons that Duke Energy Carolinas has chosen to join with the Electric Power Suppliers⁸ to request that the Commission delay and modify the poultry waste set-aside requirement.

4. Hydropower

Based on the Commission's recent interpretations of the intent of Senate Bill 3⁹, Duke Energy Carolinas is unable to utilize any of its existing hydroelectric power resources for the Company's compliance with REPS. The Commission's interpretation differs from the Company's original view, and as a result, Duke Energy Carolinas' need for other forms of renewable energy resources has increased. The Company is working to address this need through the procurement or development of other renewable energy resources.

- a. Although the Commission did not approve many of the hydro facility registration applications made by the Company, Duke Energy Carolinas did receive Commission approval of six (6) of its hydro stations as

⁷ See *Order on Duke Energy Carolinas, LLC, Motion for Clarification*, Docket No. E-100, Sub 113 (May 7, 2009).

⁸ See *Joint Electric Power Suppliers Motion*, filed in Docket E-100, Sub 113 (Aug. 14, 2009).

⁹ See *Order on Public Staff's Motion for Clarification*, Docket No. E-100, Sub 113 (June 7, 2009).

renewable energy facilities.¹⁰ These facilities generate approximately 107,000 RECs annually, but these RECs cannot be used to meet the compliance obligation of Duke Energy Carolinas. As a result, the Company will seek to utilize these RECs to aid in meeting a portion of the REPS compliance needs of its full requirements wholesale customers, that may use the RECs from these facilities pursuant to N.C. Gen. Stat. 62-133.8(c)(2)c. However, the ability of these wholesale customers to utilize these RECs will be limited due to the statutory 30% limitation on hydroelectric use, in conjunction with their expected Southeastern Power Administration ("SEPA") allocations of hydroelectric power resources.

- b. The Company has purchased RECs from eight (8) small hydroelectric power facilities in the Carolinas which qualify as new renewable energy facilities. The Company will bank these RECs to be used in 2012 and beyond to meet its general renewable energy requirement under REPS.

5. Biomass Resources

Pursuant to N.C. Gen. Stat. § 62-133.8(b)(2)b, Duke Energy Carolinas intends to use the generation and purchase of electricity from biomass to meet its REPS obligations. The Company plans to utilize the following renewable energy resources:

a. Landfill Methane

- i) Last year, Duke Energy Carolinas signed a 20-year PPA with Methane Power Durham, LP to purchase the electricity generated from a 2.1 MW capacity landfill gas facility at the Durham Landfill. The Company has signed a contract for an additional 1.0 MW of capacity with Methane Power Durham, LP related to an expansion of the project. The first 2.1 MWs is expected to be operational by mid-September 2009 and the additional capacity is expected to be operational by October 1, 2009.
- ii) Duke Energy Carolinas continues to explore additional contracts for electricity and RECs from landfill gas facilities throughout its Carolinas service territory.

b. Duke Energy Carolinas' Biomass Initiatives at Fossil Units

¹⁰ Duke Energy Carolinas plans to resubmit registration statements for its remaining hydro stations where are units together are less than 10 MW in capacity, and will use this generation to meet the REPS requirements of its full requirements wholesale customers.

In late August 2009, Duke Energy Carolinas began a one-month test burn for co-firing biomass at Buck Unit 6, located near Salisbury, North Carolina. This test was originally scheduled to begin in July, but was delayed due to on-going regulatory discussions with North Carolina Department of Environment and Natural Resources ("DENR") regarding the potential treatment of biomass as a solid waste. Resolution of this issue is critical to the Company's ability to plan for future biomass projects and compliance with the REPS. This issue affects all potential biomass projects, whether they are utility-owned facilities or independent power producers. DENR has permitted the Buck test burn to proceed although subsequent activities could be prohibited if these matters are not resolved.

For the Buck test burn, the biomass will be blended on the coal belt as fuel is being loaded to the unit. This method of co-firing is referred to as co-milling. Co-milling involves introducing the biomass upstream of the bunkers so that the coal and biomass are processed together through the bunkers and pulverizers before being combusted in the boiler.

The purpose of the Buck test burn is to quantify the effects that co-firing biomass with coal has on operations and emissions of the unit. Specifically, the test burn will set out to address the following items:

- Impacts on operations including boiler and cycle efficiency
- Impacts on emissions
- Explore maximum possible biomass blend rates with and without de-rating the unit
- Impacts on minimum load
- Impacts on load following capabilities
- Impacts on Selective Non-Catalytic Reduction and Electrostatic Precipitator
- Impacts on ash basin chemistry
- Costs

Two types of biomass will be tested at blend rates ranging between 5% and 20% by weight. The first phase of the test will use sawdust, and the second phase of the test will use wood chips. The test for each fuel will start off with low percentages at approximately 5% by weight and gradually increase. One of the purposes of this test is to understand the upper limit of co-firing biomass within safety, environmental and operational constraints. Should there be operational or environmental limitations identified during the test that limit the percent of biomass that can be blended in the unit, that percentage will serve as the maximum limit. Up to 3,000 tons of biomass will be burned during this test, including up to 1,500 tons of wood chips and up to 1,500 tons of sawdust. The test burn will generate approximately 2,000 - 2,500 RECs, which will be banked for compliance.

In July of 2009, a three month trial of biomass co-firing began at Lee Steam Station, located near Williamston, South Carolina, using the co-milling method. A successful one month biomass test burn was completed at this facility in 2007 using sawdust and shredded pallets. The 2009 test seeks to build upon that experience by extending the test duration and expanding the biomass source to typical forest products. The extended duration of this test allows observation of more

long term operational effects. Additionally, this test is intended to allow Duke Energy Carolinas to explore the challenges and opportunities of procuring production type biomass fuels in terms of volume, product size, quality, delivery, contractual obligations, etc. This trial also uses the co-milling method, but in this case the biomass is introduced on the coal pile. The Title V permit for Lee Steam Station allows for burning of clean wood and untreated pallets on a permanent basis.

The three month biomass trial at Lee was originally projected to use 12,000 tons of locally produced materials. However, due to a mild summer and decreasing electricity demand, the units have not operated as expected. From July through mid-August, approximately 1,500 tons of biomass have been obtained for the Lee trial. To date, approximately 850 RECs have been produced. The total RECs for the Lee trial are estimated to be between 1,000 – 1,200 RECs, depending upon the capacity factors of the units for the remainder of the trial. These RECs will be banked for future compliance. Because co-firing is dependent upon unit dispatch, and thus affected by electric demand, the ability to bank co-fired RECs is imperative to compensate for year to year variability. Although the Company continues to view co-firing as an attractive form of renewable energy, there continue to be fuel sourcing and operational challenges associated with co-firing that the Company continues to evaluate.

Duke Energy Carolinas is evaluating the implementation of a series of permanent co-firing projects, as well as the possibility of repowering older coal stations as dedicated biomass burning facilities. Final decisions on these projects have not been made, but could generate substantial amounts of RECs that could be banked and utilized towards compliance. Decisions on these projects will depend, in part, on the results of the test burns described above, results of further co-firing and repowering assessments, and fuel supply assessments.

6. Wind

Duke Energy Carolinas is active in several efforts to better understand the wind resources available in North Carolina. The Company notes that North Carolina possesses wind resources in the mountains, on the coast and offshore that are sufficient for the construction of wind turbines. The Company has an interest in responsible development of wind projects in the State, but it has not received any viable proposals in part due to the limitation on development in the Western part of the state and the well-documented challenges of developing coastal and offshore wind projects elsewhere along the east coast of the United States. A recently published report by the University of North Carolina, *Coastal Wind: Energy for NC's Future*, identifies coastal and offshore resources as a potentially scalable renewable resource for the State. Duke Energy Carolinas is active in the State's wind working groups and other collaborative efforts to promote the sustainable development of wind-based renewable energy in North Carolina.

Duke Energy Carolinas has entered into several REC purchase agreements for out-of-state RECs derived from Texas wind farms. The Company has entered into these contracts with these new renewable energy facilities subject to the 25% annual limit for out-of-state REC usage¹¹. Accordingly, the Company has applied and received approval for cost recovery of these RECs in

¹¹ N.C. Gen. Stat. § 62-133.8(b)(2)e.

the Company's 2009 annual REPS Rider filing. Duke Energy Carolinas has created an account in the ERCOT REC Tracking System and plans to transfer these RECs into a North Carolina REC Tracking System ("NC-RETS") pending the creation of a tracking system.¹² The Company has entered into contracts for the purchase of 750,000 RECs, which the Company purchased with the intent to bank these RECs for compliance within seven years of cost recovery. These out-of-state wind RECs represent the most cost-effective renewable energy resource available in the out-of-state REC compliance markets. The Company will seek to procure additional out-of-state RECs to continue to capitalize on the availability of these low cost environmental attributes.

7. Other Renewable Resources

Duke Energy Carolinas continues to explore various technologies for the development of renewable energy resources including numerous gasification technologies.

III. COST IMPLICATIONS OF REPS COMPLIANCE PLAN

A. CURRENT & PROJECTED AVOIDED COST RATES

The current and projected avoided cost rates represent the annualized avoided cost rates in Schedule PP-N (NC), Distribution Interconnection, approved in the 2008 avoided cost filing.

ANNUALIZED CAPACITY AND ENERGY RATES (CENTS PER KWH)			
	<u>2009</u> (Current)	<u>2010</u> (Projected)	<u>2011</u> (Projected)
Variable Rate	6.40	6.40	6.40
5 Year	6.39	6.39	6.39
10 Year	6.42	6.42	6.42
15 Year	6.56	6.56	6.56
20 Year (extrapolated)	6.96	6.96	6.96
25 Year (extrapolated)	7.42	7.42	7.42

B. 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

	2009	2010	2011
Retail MWh Sales	53,782,932	53,329,377	53,823,449

¹² See NCUC Docket E-100, Sub. 126

Wholesale MWh Sales	2,356,529	2,382,682	2,409,191
Total MWh Sales	56,139,461	55,712,059	56,232,640

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

Account Type	2009	20010	2011
Residential	1,700,724	1,725,212	1,752,157
Commercial	273,862	278,088	282,931
Industrial	5,346	5,234	5,217

The account data in the tables was determined in the same manner as the reporting of customer accounts to the Energy Information Administration. In Docket No. E-7, Sub 872, the Commission addressed the definition of customer account for purposes of determining REPS incremental cost caps. In its August 21, 2009 *Order Approving Cost Recovery And Directing Further Proceedings Regarding REPS Riders* in that docket, the Commission required the Company to revise its proposed definition of accounts and make a filing within 30 days of the order of its revised REPS rider calculation based on a revised number of accounts. As such, the Company is including in this Compliance Plan customer account and cost cap data based on reporting of customer accounts to the Energy Information Administration. When the Company completes its work in revising the definition of customer account for REPS cost cap purposes the information in this Compliance Plan affected by the definition of customer account will be updated.

C. 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.¹³ Projected compliance costs for the period 2009 – 2011 are comprised of the following: the cost of solar energy from the Company's proposed Distributed Generation Solar PV Program, the cost of the Company's Biomass Initiatives at Fossil Units, the cost of energy purchases and the cost of REC purchases. Cost data in the table are presented by calendar year, whereas projected REPS rider amounts will capture costs for the billing period for which the rate will be in effect. The cost cap data is based on the reporting of customer accounts to the Energy Information Administration. As stated above, when the Company completes its work in revising the definition of customer account for REPS cost cap purposes, pursuant to the Commission's August 21 Order, the information in this Compliance Plan affected by the definition of customer account will be updated.

¹³ See Section V for more information regarding wholesale customer compliance.

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

	2009	2010	2011
Projected Annual Cost Caps	\$ 32,956,769	\$ 33,352,593	\$ 33,850,966
Total projected compliance costs	\$ 8,715,337	\$ 14,974,549	\$ 25,407,348
Total incremental costs	\$ 6,771,514	\$ 4,859,085	\$ 8,588,219
Recovered through the Fuel Rider	\$ 1,942,895	\$ 9,631,940	\$ 15,706,130
Recovered through the Fuel Rider ¢/KWh	.0025¢	.0122¢	.0199¢
Annual REPS Rider - Residential	\$ 2.06	\$ 1.46	\$ 2.54
Annual REPS Rider - General	\$ 10.27	\$ 7.29	\$ 12.69
Annual REPS Rider - Industrial	\$ 102.72	\$ 72.87	\$126.90

V. WHOLESALE CUSTOMER COMPLIANCE

As part of its portfolio of resources, Duke Energy Carolinas will 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, for these customers in aggregate for each of the 3 years being reported is approximately 2,400,000 MWh 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 may 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.

Respectfully submitted, this 31st day of August 2009.

Lara Simmons Nichols
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DUKE ENERGY CAROLINAS' RENEWABLE RESOURCES

Resource Type	Expected RECs ¹⁴ (1 MWH = 1 REC)			
	2008	2009	2010	2011
ENERGY EFFICIENCY PLAN¹⁵	-	73,682	309,917	584,555
SOLAR				
SunEdison ¹⁶	-	-	5,460	27,527
Duke Energy Distributed Generation Solar	-	25	8,375	15,000
FLS Energy ¹⁷	-	125 - 250	2,000 - 3,000	4,000 - 5,500
Vanir Energy ¹⁷	-	2,000 - 5,000	2,000 - 5,000	2,000 - 5,000
Solar Subtotal	-	2,150 - 5,275	17,835 - 21,835	48,527 - 53,027
SWINE WASTE	-	-	-	-
Swine Waste Subtotal	-	-	-	-
POULTRY WASTE	-	-	-	-
Poultry Waste Subtotal	-	-	-	-
HYDROPOWER				
Duke Energy Carolinas Hydro ¹⁸	107,800	107,800	107,800	110,798
Barbara Ann Evans	170	700	700	700
Cliffside Mills, LLC	815	1,950	1,950	1,950
Haw River Hydro Co.	4,383	5,596	5,596	5,596
Mayo Hydropower LLC—Avalon Hydro	2,624	4,760	4,760	4,760
Mayo Hydropower LLC—Mayo Hydro	2,336	3,438	3,438	3,438
Pickens Mill Hydro, LLC	726	1,917	1,917	1,917
Ray Ward—Ward Mill Hydro	306	650	650	650
South Yadkin Power, Inc.	881	1,390	1,390	1,390
Spray Cotton Mills	3,398	3,637	3,637	3,637
Inman Mills-Riverdale	-	2,000	6,000	6,000
Hydro Subtotal	123,439	133,838	137,838	140,836
BIOMASS				
Methane Power Durham, LP ¹⁹	-	5,571	22,285	22,285
Greenville Gas Producers, LLC	9,194	24,000	24,000	24,000
Co-Firing	-	3,000	28,000	88,000
Biomass Subtotal	9,194	32,571	74,285	134,285
WIND				
NextEra (Formerly FP&L)	-	250,000	-	-
Element Markets	-	150,000	-	-
Luminant/TXU	-	100,000	-	-
Invenergy	-	250,000	-	-
Wind Subtotal	-	750,000	-	-
TOTALS	132,633	992,241 - 995,366	539,875 - 543,875	908,203 - 912,703

¹⁴ All quantities of RECs are estimates based on the best available information as of the date of this filing.

¹⁵ The Company's Energy Efficiency Plan is still pending final authorization by the NCUC.

¹⁶ SunEdison plans to finance its solar farm development in tranches. The 2010 production estimates are based on an assumption that an initial 3.5 MW tranche will be completed by year-end 2009. However, challenges in obtaining financing may delay the initial tranche. Likewise, 2010 production could exceed expectations if additional megawatts of capacity are brought on-line in 2010.

¹⁷ The lower end of the range represents the minimum guaranteed delivered quantities of RECs by FLS Energy and Vanir Energy. The upper end of the range represents Duke Energy Carolinas' maximum obligated purchase quantity.

¹⁸ The Company plans to re-submit registrations for its hydroelectric power stations that are under 10 MW in capacity.

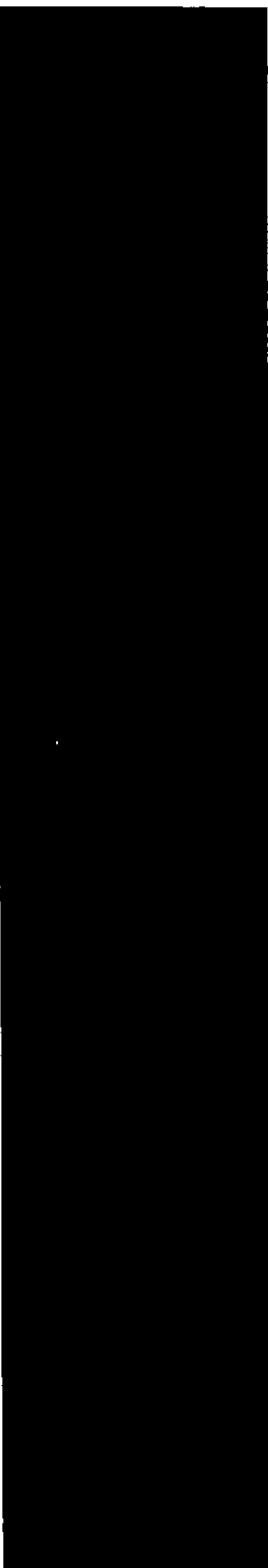
¹⁹ Methane Power Durham, LP revised its generation projections based on revised online dates for its units (September—Unit 1, 2 and October—Unit 3).

FILED

AUG 30 2013

Clerk's Office
N.C. Utilities Commission

Duke Energy Progress, Inc.
 2009 REPS Compliance Filing (Revised August 30, 2013)
 Revised Exhibit 1: Executed Contract Summary

Counterparty:	Resource Type:	Load:	Contract Duration (years):	Capacity MW	Energy MWh	Expected Annual RECs:	
	Customer A	Landfill Gas	Baseload	3	4	21,000	19,400
	Customer B	Biomass	Baseload	6	25	185,405	185,405
	Customer C	Biomass (thermal RECs)	REC Only	6	na	0	60,000
	Customer D	Solar PV	Energy Only	10	na	1,472	1,472
	Customer E	Solar PV	Energy Only	20	na	1,472	1,472
	Customer F	Solar PV	Energy Only	20	na	1,752	1,752
	Customer G	Solar PV	Energy Only	10	na	95	95
	Customer H	Solar PV RECs	RECs Only	10	na	0	69
	Customer I	Solar PV	Energy Only	10	na	71	71
	Customer J	Solar PV	Energy Only	20	na	788	788
	Customer K	Solar PV	Energy Only	20	na	5,046	5,046
	Customer L	Solar PV	Energy Only	20	na	1,640	1,640
	Customer M	Solar Thermal	RECs Only	15	na	0	350
	Customer N	Solar Thermal	RECs Only	15	na	0	114
	Customer O	Solar Thermal	RECs Only	15	na	0	270
	Customer P	Solar Thermal	RECs Only	15	na	0	382
	Customer Q	Solar Thermal	RECs Only	15	na	0	87
	Customer R	Hydro	RECs Only	3	na	0	1,029
	Customer S	Hydro	RECs Only	3	na	0	1,752
	Customer T	Hydro	RECs Only	3	na	0	2,847
	Customer U	Hydro	RECs Only	3	na	0	6,570
	Customer V	Hydro	RECs Only	3	na	0	2,628
	Customer W	Hydro	RECs Only	3	na	0	3,066
	Customer X	Wind RECs	RECs Only	2	na	0	400,000 (1)
	Customer Y	Wind RECs	RECs Only	2	na	0	1,000,000 (1)

Footnote

(1) These figures are total contracted RECs and not representative of expected annual deliveries

Respectfully submitted, this 31st day of August 2009.

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Poultry Waste Subtotal	-	-	-	-
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